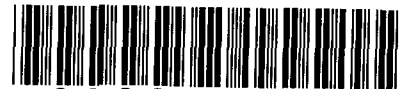


NEW APPLICATION



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Arizona Corporation Commission

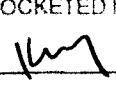
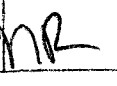
COMMISSIONERS

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CORP COMMISSION  
DOCKET CONTROL

AUG - 3 2012

GARY PIERCE, Chairman  
BOB STUMP  
SANDRA D. KENNEDY  
PAUL NEWMAN  
BRENDA BURNS

DOCKETED BY
 

IN THE MATTER OF THE APPLICATION OF  
SOUTHWEST TRANSMISSION COOPERATIVE,  
INC. FOR A HEARING TO DETERMINE THE  
FAIR VALUE OF ITS PROPERTY FOR  
RATEMAKING PURPOSES, TO FIX A JUST AND  
REASONABLE RETURN THEREON AND TO  
APPROVE RATES DESIGNED TO DEVELOP  
SUCH RETURN

Docket No. E-04100A-12-0353

**APPLICATION**

GALLAGHER & KENNEDY, P.A.  
2575 E. CAMELBACK ROAD  
PHOENIX, ARIZONA 85016-9225  
(602) 530-8000

Southwest Transmission Cooperative, Inc. ("SWTC"), by and through its undersigned attorneys, in support of its Application, states as follows:

1. SWTC is a non-profit electric transmission cooperative which supplies transmission service primarily to its Class A and B Members. In turn, the Class A Member distribution cooperatives provide the electricity transmitted by SWTC to their retail member owners who are located primarily in rural areas of Arizona.

2. SWTC's 13-member Board of Directors oversees all aspects of its operations. Twelve members of its Board represent SWTC's six Class A Member distribution cooperatives. The remaining Board member represents the Arizona Electric Power Cooperative, Inc. ("AEP CO") and Sierra Southwest Cooperative Services, Inc., which are Class B members of SWTC. SWTC's Board has authorized the filing of this rate application.

1           3.       As a transmitting utility under the Federal Power Act, SWTC is also subject to  
2 FERC's jurisdiction. In order to meet the reciprocity requirements of Order 888, SWTC  
3 maintains an Open Access Transmission Tariff.

4           4.       SWTC's current rates were authorized by the Commission in Decision No. 72030.

5           5.       Pursuant to the requirements of A.A.C. R14-2-103, submitted herewith and  
6 incorporated herein are the Schedules in support of SWTC's Application. Also submitted are the  
7 Direct Testimonies of Messrs. Scott and Pierson.

8           6.       The Schedules and Testimony support SWTC's request for an overall revenue  
9 decrease of approximately \$12.8 million or 29%. This decrease is expected to produce a net  
10 margin of \$4.4 million, a Times Interest Earned Ratio of 1.88, a Debt Service Coverage Ratio  
11 of 1.35 and a rate of return of 9.34%.

12          7.       SWTC requests that the Commission approve its proposed rates, including (a) the  
13 Network Services Rate's monthly revenue requirement of \$1,570,730; (b) maximum Firm and  
14 Non-Firm Point-to-Point Services Rates of \$2.558/kW month; (c) a System Control & Load  
15 Dispatching Rate of \$0.173/kW month; and (d) other Network and Point-to-Point Ancillary  
16 Services Rates as summarized in Schedule G-2A, page 2. The requested effective date for these  
17 rates is November 1, 2013, which is the same effective date proposed by AEPCO in its currently-  
18 pending rate case (Docket No. E-01773A-12-0305). Should the AEPCO rates' effective date  
19 change, SWTC asks for the same rates' effective date.

20          8.       SWTC also requests that the Commission approve revised depreciation rates as  
21 discussed in Mr. Scott's testimony and as set forth in Exhibit PS-2 to his testimony.

9. Finally, SWTC proposes and requests that the Commission approve a Transmission Revenue Adjustor, which mechanism is discussed at greater length in the Testimony.

Having fully stated its Application, SWTC requests that the Commission enter its Order:

1. Approving the revised rates requested;
2. Approving the revised depreciation rates;
3. Approving a Transmission Revenue Adjustor; and
4. Granting SWTC such other and further relief as it deems appropriate under the circumstances.

RESPECTFULLY SUBMITTED this 3<sup>rd</sup> day of August, 2012.

GALLAGHER & KENNEDY, P.A.

By Michael M. Grant  
Michael M. Grant  
Jennifer A. Cranston  
2575 East Camelback Road  
Phoenix, Arizona 85016-9225  
Attorneys for Southwest Transmission  
Cooperative, Inc.

**Original and 13 copies** of this Application, Schedules and Direct Testimony filed this 3<sup>rd</sup> day of August, 2012, with:

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

1 **Copies** of this Application and  
2 Direct Testimony hand delivered  
3 this 3<sup>rd</sup> day of August, 2012, to:

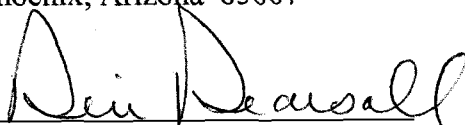
4 Bridget Humphrey  
5 Legal Division  
6 Arizona Corporation Commission  
7 1200 West Washington Street  
8 Phoenix, Arizona 85007

9 **Copies** of this Application, Schedules  
10 and Direct Testimony delivered this  
11 3<sup>rd</sup> day of August, 2012, to:

12 Terri Ford  
13 Utilities Division  
14 Arizona Corporation Commission  
15 1200 West Washington Street  
16 Phoenix, Arizona 85007


17 Barbara Keene  
18 Utilities Division  
19 Arizona Corporation Commission  
20 1200 West Washington Street  
21 Phoenix, Arizona 85007

22 Candrea Allen  
23 Utilities Division  
24 Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

17   
18 15169-19/3103543





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**BEFORE THE ARIZONA CORPORATION COMMISSION**

**A.A.C. R14-2-103.B SCHEDULES**

**IN SUPPORT OF**

**THE SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

**APPLICATION**

**for**

**GENERAL RATE RELIEF**

**DOCKET NO. E-04100A**

**AUGUST 2012**

**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

**R14-2-103.B Schedules  
in Support of Its**

**APPLICATION  
FOR  
GENERAL RATE RELIEF**

**TEST YEAR ENDED DECEMBER 31, 2011**

# Southwest Transmission Cooperative, Inc.

## TABLE OF CONTENTS

<b>A.</b>	<b><u>SUMMARY SCHEDULES</u></b>	<b>SCHEDULE NO.</b>
	COMPUTATION OF INCREASE IN GROSS REVENUE REQUIREMENTS	A-1
	SUMMARY RESULTS OF OPERATIONS	A-2
	SUMMARY OF CAPITAL STRUCTURE	A-3
	CONSTRUCTION EXPENDITURES AND GROSS UTILITY PLANT IN SERVICE	A-4
	SUMMARY OF CHANGES IN FINANCIAL POSITION	A-5
<b>B.</b>	<b><u>RATE BASE SCHEDULES</u></b>	
	SUMMARY OF ORIGINAL COST RATE BASE	B-1
	ORIGINAL COST RATE BASE PRO FORMA ADJUSTMENTS	B-2
	RCND RATE BASE PRO FORMA ADJUSTMENTS	B-3
	RCND BY MAJOR PLANT ACCOUNTS	B-4
	COMPUTATION OF WORKING CAPITAL	B-5
<b>C.</b>	<b><u>TEST YEAR INCOME STATEMENTS</u></b>	
	RECLASSIFIED & ADJUSTED TEST YEAR END INCOME STATEMENT	C-1
	RECLASSIFICATIONS & INCOME STATEMENT PRO FORMA ADJUSTMENTS	C-2
	COMPUTATION OF GROSS REVENUE CONVERSION FACTOR	C-3
<b>D.</b>	<b><u>COST OF CAPITAL</u></b>	
	SUMMARY COST OF CAPITAL	D-1
	COST OF LONG-TERM AND SHORT-TERM DEBT	D-2
	COST OF LONG-TERM AND SHORT-TERM DEBT	D-2A
	COST OF PREFERRED STOCK	D-3
	COST OF COMMON EQUITY	D-4

# Southwest Transmission Cooperative, Inc.

## TABLE OF CONTENTS

	SCHEDULE NO.
<b>E. FINANCIAL STATEMENTS AND STATISTICAL SCHEDULES</b>	
COMPARATIVE BALANCE SHEETS	E-1
COMPARATIVE INCOME STATEMENTS	E-2
COMPARATIVE STATEMENT OF CHANGES IN FINANCIAL POSITION	E-3
STATEMENT OF CHANGE IN EQUITY	E-4
DETAIL OF UTILITY PLANT	E-5
STATEMENT OF CHANGE IN EQUITY	E-6
OPERATING STATISTICS	E-7
TAXES CHARGED TO OPERATIONS	E-8
NOTES TO FINANCIAL STATEMENTS	E-9
<b>F. PROJECTIONS AND FORECASTS</b>	
PROJECTED INCOME STATEMENT PRESENT AND PROPOSED RATES	F-1
PROJECTED CHANGES IN FINANCIAL POSITION PRESENT AND PROPOSED RATES	F-2
PROJECTED CONSTRUCTION REQUIREMENTS	F-3
ASSUMPTIONS USED IN DEVELOPING PROJECTIONS	F-4
<b>G. COST OF SERVICE ANALYSIS</b>	
COST OF SERVICE SUMMARY - PRESENT RATES	G-1
COST OF SERVICE SUMMARY - PROPOSED RATES	G-2
DERIVATION OF REVENUE REQUIREMENTS, TRANSMISSION RATES & CONTROL AREA SERVICES	G-2A
<b>H. EFFECT OF PROPOSED TARIFF SCHEDULES</b>	
SUMMARY OF REVENUE BY DETAILED CLASS 2011 - ANNUALIZED	H-1
ANALYSIS OF REVENUE BY DETAILED CLASS 2011 - ANNUALIZED	H-2
CHANGES IN REPRESENTATIVE RATE SCHEDULES	H-3
TYPICAL BILL ANALYSIS	H-4
BILL COUNT	H-5

A

# Southwest Transmission Cooperative, Inc.

## Computation Of Increase In Gross Revenue Requirements

Test Year Ended 12/31/2011

LINE NO.	ORIGINAL COST	
1. ADJUSTED RATE BASE	\$ 99,009,871 (a)	
2. ADJUSTED OPERATING INCOME (MARGINS)	22,004,121 (b)	
3. CURRENT RATE OF RETURN	22.22%	
4. REQUIRED OPERATING INCOME (MARGINS)	9,246,908 (c)	
5. REQUIRED RATE OF RETURN	9.34%	
6. OPERATING INCOME DEFICIENCY	\$ (12,757,213)	
7. INCREASE (DECREASE) IN GROSS REV. REQUIREMENTS	\$ (12,757,213)	
	PROJECTED REVENUE INC. DUE TO RATES	% DOLLAR INCREASE
CUSTOMER CLASSIFICATION	(d)	(d)
8. NETWORK SERVICES	\$ (7,924,849)	-28.90%
9. POINT-TO-POINT SERVICES	(4,832,365)	-29.10%
10. TOTAL	\$ (12,757,213)	-28.98%

### SUPPORTING SCHEDULES:

- (a) B-1, Line 9
- (b) A-2, Line 3
- (c) G-2, Line 10
- (d) H-1

# Southwest Transmission Cooperative, Inc.

## Summary Results of Operations

LINE NO.	-PRIOR YEARS-		12/31/2011		PROJ. YEAR		12/31/2011	
	12/31/2009 (a)	12/31/2010 (a)	TEST YEAR ACTUAL (a)	TEST YEAR ADJUSTED (b)	PRESENT RATES (c)	PROPOSED RATES (c)		
1. GROSS REVENUE	\$ 35,256,945	\$ 34,542,603	\$ 39,317,802	\$ 46,434,286	\$ 46,434,286	\$ 33,677,073		
2. OPERATING EXPENSES	29,910,324	29,413,537	28,437,140	24,430,165	24,430,165	24,430,165		
3. ELECTRIC OPERATING INCOME (MARGINS)	5,346,621	5,129,066	10,880,662	22,004,121	22,004,121	9,246,908		
4. TOTAL INTEREST & OTHER DEDUCTIONS	5,419,041	5,999,644	5,509,657	5,170,450	5,170,450	5,170,450		
5. TOTAL OTHER NON OPERATING INCOME	112,907	194,170	307,780	307,780	307,780	307,780		
5a. EXTRAORDINARY ITEMS	-	-	-	-	-	-		
6. NET INCOME (MARGINS)	\$ 40,487	\$ (676,408)	\$ 5,678,785	\$ 17,141,451	\$ 17,141,451	\$ 4,384,238		
7. THROUGH 14.	NOT APPLICABLE							
15. TIMES TOTAL INTEREST EARNED (TIER)	1.01	0.87	2.06	4.42	4.42	1.88		
16. DEBT SERVICE COVERAGE (DSC)	0.76	0.71	1.62	2.63	2.63	1.35		

### SUPPORTING SCHEDULES:

(a) E-2, Pages 1-2

(b) C-1, Pages 3-4

(c) F-1, Pages 1-2

# Southwest Transmission Cooperative, Inc.

## Summary of Capital Structure

LINE NO.	DESCRIPTION:	PRIOR YEARS		ACTUAL TEST YEAR	END OF PROJECTED YR
		12/31/2009	12/31/2010	12/31/2011	12/31/2012
1.	SHORT-TERM DEBT	\$ -	\$ -	\$ -	\$ -
2.	LONG-TERM DEBT	112,206,312	115,281,027	116,602,775	116,299,324
3.	TOTAL DEBT (a)	112,206,312	115,281,027	116,602,775	116,299,324
4.	PREFERRED STOCK	-	-	-	-
5.	MARGINS AND EQUITY (b)	9,439,165	8,763,551	14,442,409	18,826,647
6.	TOTAL CAPITAL	\$ 121,645,477	\$ 124,044,578	\$ 131,045,184	\$ 135,125,971
CAPITALIZATION RATIOS: (%)					
7.	SHORT-TERM DEBT	0.00%	0.00%	0.00%	0.00%
8.	LONG-TERM DEBT	92.24%	92.94%	88.98%	86.07%
9.	TOTAL DEBT	92.24%	92.94%	88.98%	86.07%
10.	PREFERRED STOCK	0.00%	0.00%	0.00%	0.00%
11.	MARGINS AND EQUITY	7.76%	7.06%	11.02%	13.93%
		100.00%	100.00%	100.00%	100.00%
12.	WEIGHTED COST OF SHORT TERM DEBT	0.00%	0.00%	0.00%	0.00%
13.	WEIGHTED COST OF LONG TERM DEBT	4.54%	4.61%	4.56%	4.29%
14.	WEIGHTED COST OF SENIOR CAPITAL	NOT APPLICABLE			

## SUPPORTING SCHEDULES:

(a) D-2

(b) E-1, Page 2, Line 25



**Southwest Transmission Cooperative, Inc.**  
**Construction Expenditures and Gross Utility Plant in Service**

<u>LINE NO.</u>		<u>CONSTRUCTION EXPENDITURES</u>		<u>NET PLANT ADDITIONS</u>		<u>GROSS UTILITY PLANT IN SERVICE</u>	
1.	12/31/2009	\$ 11,175,627	(a)	\$ 27,241,506	\$	173,936,980	(c)
2.	12/31/2010	1,614,371	(a)	2,685,120		176,622,100	(c)
3.	12/31/2011	2,694,311	(a)	(98,261)		176,523,839	(c)
4.	12/31/2012	9,561,000	(b)	2,349,008		178,872,847	
5.	12/31/2013	5,119,000	(b)	9,561,000		188,433,847	
6.	12/31/2014	\$ 4,219,000	(b)	\$ 5,119,000	\$	193,552,847	

## SUPPORTING SCHEDULES:

(a) E-3, Line 12

(b) F-3, Line 3

(c) E-1, Page 1, Line 1

**Southwest Transmission Cooperative, Inc.**  
**Summary of Changes in Financial Position**

LINE NO.	- PRIOR YEARS (a) -		TEST YEAR 12/31/2011	12 MOS. ENDED 12/31/2011	
	12/31/2009	12/31/2010		PRESENT RATES (b)	PROPOSED RATES (b)
1. NET CASH PROVIDED BY OPERATING ACTIVITIES	\$ (423,606)	\$ 4,408,434	\$ 9,766,150	\$ 22,579,879	\$ 9,822,666
2. NET CASH USED IN INVESTING ACTIVITIES	(10,800,627)	(1,682,958)	(3,419,224)	(3,419,224)	(3,419,224)
3. NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES	13,737,416	1,432,139	(1,268,648)	(1,268,648)	(1,268,648)
4. NET DECREASE IN CASH AND CASH EQ.	\$ 2,513,183	\$ 4,157,615	\$ 5,078,278	\$ 17,892,007	\$ 5,134,794

SUPPORTING SCHEDULES:

- (a) E-3  
(b) F-2

B

**Southwest Transmission Cooperative, Inc.**  
Summary Of Original Cost Rate Base

<u>LINE NO.</u>	<u>ORIGINAL COST RATE BASE*</u>
1. GROSS UTILITY PLANT IN SERVICE	\$ 176,519,426 (a)
2. LESS: ACCUMULATED DEPRECIATION & AMORT.	(80,394,632) (b)
3. NET UTILITY PLANT IN SERVICE	<u>96,124,794 (b)</u>
LESS:	
4. CUSTOMER ADVANCES FOR CONSTRUCTION	-
5. CONTRIBUTIONS IN AID OF CONSTRUCTION	-
6. ADD: ALLOWANCE FOR WORKING CAPITAL	2,885,077 (c)
7. PLANT HELD FOR FUTURE USE	- (d)
8. DEFERRED DEBITS	<u>- (e)</u>
9. TOTAL RATE BASE	<u>\$ 99,009,871 (f)</u>

• INCLUDES PRO FORMA ADJUSTMENTS

## SUPPORTING SCHEDULES:

- (a) B-2, Line 8
- (b) B-2, Line 11-12
- (c) B-5, Line 2
- (d) E-5, Page 2
- (e) E-1, Page 1

## RECAP SCHEDULE:

- (f) A-1

**Southwest Transmission Cooperative, Inc.**  
**Summary of Original Cost Rate Base**

LINE NO.	ACTUAL AT END OF TEST YEAR 12/31/2011 (a)	PRO FORMA ADJUSTMENTS 12/31/2011 (a)	ADJUSTED AT END OF TEST YEAR 12/31/2011
<b>TRANSMISSION:</b>			
1. GROSS PLANT	\$ 154,590,042	\$ -	\$ 154,590,042
2. ACCUMULATED DEPRECIATION	(70,397,842)	1,351,063	(69,046,779)
3. NET PLANT	84,192,200	1,351,063	85,543,263
<b>GENERAL &amp; INTANGIBLE:</b>			
4. GROSS PLANT	21,933,797	(4,413)	21,929,384
5. ACCUMULATED DEPRECIATION	(9,073,061)	-	(9,073,061)
6. NET PLANT	12,860,736	(4,413)	12,856,323
7. RWIP	(6,228)	6,228	-
8. TOTAL GROSS PLANT	176,523,839	(4,413)	176,519,426 (b)
9. TOTAL ACCUM. DEP. & RWIP	(79,477,131)	1,357,291	(78,119,840)
10. ACCUMULATED AMORTIZATION	(2,274,792)	-	(2,274,792)
11. TOTAL ACCUM DEP. & AMORT.	(81,751,923)	1,357,291	(80,394,632)
12. TOTAL NET PLANT	\$ 94,771,916	\$ 1,352,878	\$ 96,124,794

SUPPORTING SCHEDULES:

(a) E-5, Pages 3-4

RECAP SCHEDULE:

(b) B-1

**Southwest Transmission Cooperative, Inc.**  
**RCND Rate Base Pro Forma Adjustments**

**THIS SCHEDULE IS NOT APPLICABLE**

**Southwest Transmission Cooperative, Inc.**  
RCND By Major Plant Accounts

THIS SCHEDULE IS NOT APPLICABLE

**Southwest Transmission Cooperative, Inc.**  
**Computation Of Working Capital**

**LINE  
NO.**

1.	CASH WORKING CAPITAL	\$	- (a)
2.	MATERIALS AND SUPPLIES	2,885,077	(b)
3.	PREPAYMENTS		- (c)
4.	CFC CERTIFICATES & BONDS	<u>          </u>	-
5.	TOTAL WORKING CAPITAL	<u>\$ 2,885,077</u>	(d)

**SUPPORTING SCHEDULES:**

(a) B-5, Page 2  
(b) B-5, Page 3  
(c) B-5, Page 4

**RECAP SCHEDULE:**

(d) B-1, Line 6



**Southwest Transmission Cooperative, Inc.**  
Computation of Cash Working Capital

**LINE  
NO.**

1.	TOTAL PRO FORMA O&M EXPENSES EXCL PRO FORMA FUEL & OTHER EXP	\$	-
	NET OTHER O&M EXPENSE LAG		
2.	A. DAYS		-
3.	B. PERCENT	0.00%	
4.	CASH WORKING CAPITAL OTHER THAN FUEL		-
5.	FUEL EXPENSE		-
	FUEL EXPENSE LAG:		
6.	A. LAG IN REVENUES (DAYS)		-
7.	B. LAG IN EXPENSES (DAYS)		-
8.	C. NET LAG -DAYS		-
9.	D. PERCENT	0.00%	
10.	CASH WORKING CAPITAL FUEL		-
11.	TOTAL CASH WORKING CAPITAL	\$	- (a)

SUPPORTING SCHEDULES:

RECAP SCHEDULE:  
(a) B-5, Page 1

**Southwest Transmission Cooperative, Inc.**  
Computation of Materials & Supplies Working Capital

LINE NO.	PER BOOKS	PRO FORMA ADJUSTMENTS	AS ADJUSTED
1. DECEMBER (Prior Year)	\$ 2,176,168		
2. JANUARY	2,294,496	\$ -	\$ 2,235,332
3. FEBRUARY	2,310,863	-	2,302,680
4. MARCH	2,353,655	-	2,332,259
5. APRIL	2,408,760	-	2,381,208
6. MAY	2,668,406	-	2,538,583
7. JUNE	2,768,104	-	2,718,255
8. JULY	2,761,298	-	2,764,701
9. AUGUST	2,762,043	-	2,761,671
10. SEPTEMBER	2,740,837	-	2,751,440
11. OCTOBER	4,190,603	-	3,465,720
12. NOVEMBER	4,197,276	-	4,193,940
13. DECEMBER	4,152,990	-	4,175,133
14. TOTAL	<u>\$ 37,785,499</u>	<u>\$ -</u>	<u>\$ 34,620,920</u>
15. 12-MONTH AVERAGE		\$ -	\$ 2,885,077 (a)

SUPPORTING SCHEDULES:

RECAP SCHEDULE:  
(a) B-5, Page 1

**Southwest Transmission Cooperative, Inc.**  
Computation of Prepayments Working Capital

LINE NO.	PER BOOKS	PRO FORMA ADJUSTMENTS	AS ADJUSTED
1. DECEMBER (Prior Yr)	\$ -	\$ -	\$ -
2. JANUARY	-	-	-
3. FEBRUARY	-	-	-
4. MARCH	-	-	-
5. APRIL	-	-	-
6. MAY	-	-	-
7. JUNE	-	-	-
8. JULY	-	-	-
9. AUGUST	-	-	-
10. SEPTEMBER	-	-	-
11. OCTOBER	-	-	-
12. NOVEMBER	-	-	-
13. DECEMBER	-	-	-
14. TOTAL	\$ -	\$ -	\$ -
15. 13-MONTH AVERAGE	\$ -	\$ -	\$ - (a)

SUPPORTING SCHEDULES:

RECAP SCHEDULE:  
(a) B-5, Page 1

C

# Southwest Transmission Cooperative, Inc.

## Reclassified Test Year End Income Statement

LINE NO.	TEST YEAR 12/31/2011	RECLASS ADJUST. (b)	RECLASS TEST YEAR 12/31/2011 (c)
<b>REVENUES:</b>			
1. NETWORK TRANSMISSION SERVICE	\$ 26,139,718	\$ -	\$ 26,139,718
2. POINT-TO -POINT	6,407,808	-	6,407,808
3. TOTAL ELECTRIC REVENUE	\$ 32,547,526	\$ - \$ -	\$ 32,547,526
4. LOAD DISPATCH & SYSTEM CONTROL	1,834,547	-	1,834,547
5. DIRECT ASSIGNMENT FACILITIES	1,939,125	-	1,939,125
6. REGULATORY ASSET CHARGE	-	-	-
7. OTHER OPERATING REVENUE	588,543	-	588,543
8. ANCILLARY SERVICES FROM AEPCO	812,643	(812,643)	-
9. SPECIAL CONTRACTS & OTHER	1,595,418	-	1,595,418
10. TOTAL OPERATING REVENUE	\$ 39,317,802	\$ (812,643)	\$ 38,505,159
<b>OPERATING EXPENSES:</b>			
11. OPERATIONS			
12. - ENERGY A/C 555	622	-	622
13. A/C 556	3,469,533	(355)	3,469,178
14. A/C 557	-	-	-
15. TRANSMISSION			
16. A/C 560	2,521,205	(44)	2,521,161
17. A/C 561	76,139	-	76,139
18. A/C 562	989,518	(841,063)	148,455
19. A/C 563	1,148,531	(841,063)	307,468
20. A/C 565	5,050,364	(812,643)	4,237,721
21. A/C 566	293,666	(238,571)	55,095
22. A/C 567	31,429	-	31,429
23. ADMINISTRATIVE & GENERAL	5,092,472	(101,089)	4,991,383
24. TOTAL OPERATIONS	\$ 18,673,479	\$ (2,834,828)	\$ 15,838,651
25. MAINTENANCE			
26. A/C 568	1,314,967	(44)	1,314,923
27. A/C 569	28,121	-	28,121
28. A/C 570	1,309,941	-	1,309,941
29. A/C 571	1,346,666	-	1,346,666
30. A/C 573	104,998	-	104,998
31. GENERAL PLANT	274,321	-	274,321
32. TOTAL MAINTENANCE	\$ 4,379,014	\$ (44)	\$ 4,378,970

**Southwest Transmission Cooperative, Inc.**  
Reclassified Test Year End Income Statement

LINE NO.	TEST YEAR 12/31/2011	RECLASS ADJUST. (b)	RECLASS TEST YEAR 12/31/2011 (c)
<b>OTHER:</b>			
33. DEPRECIATION & AMORTIZATION	\$ 5,384,647	\$ -	\$ 5,384,647
34. ACC GROSS REVENUE TAXES	-	-	-
35. OTHER TAXES	-	2,022,230	2,022,230
36. TOTAL OTHER	5,384,647	2,022,230	7,406,877
37. TOTAL OPERATING EXPENSES	28,437,140	(812,643)	27,624,497
38. OPERATING INCOME (MARGINS)	10,880,662	-	10,880,662
<b>INTEREST &amp; OTHER DEDUCTIONS:</b>			
39. LONG-TERM DEBT	5,348,025	-	5,348,025
40. INTEREST CHARGED TO CONSTR	(20,177)	-	(20,177)
41. OTHER INTEREST EXPENSE	7,631	-	7,631
42. OTHER DEDUCTIONS	174,178	-	174,178
43. TOTAL INTEREST EXPENSE	5,509,657	-	5,509,657
44. MARGIN AFTER INTEREST EXPENSE	5,371,005	-	5,371,005
<b>OTHER NON OPERATING INCOME:</b>			
45. INTEREST INCOME	181,178	-	181,178
46. AFUDC	-	-	-
47. OTHER NONOPERATING INCOME	126,602	-	126,602
48. TOTAL OTHER INCOME & DEDUCT	307,780	-	307,780
49. EXTRAORDINARY ITEMS	-	-	-
50. NET INCOME (MARGINS)	\$ 5,678,785	\$ -	\$ 5,678,785

SUPPORTING SCHEDULES:  
(a) E-2  
(b) C-2, Pages 1-2

RECAP SCHEDULE:  
(c) A-2

# Southwest Transmission Cooperative, Inc.

## Adjusted Test Year End Income Statement

LINE NO.		RECL TEST YR 12/31/2011	PRO FORMA ADJUST. (b)	ADJ TEST YR 12/31/2011 (c)
<b>REVENUES:</b>				
1.	NETWORK TRANSMISSION SERVICE	\$ 26,139,718	\$ 1,163	\$ 26,140,881
2.	POINT-TO -POINT	6,407,808	8,053,056	14,460,864
3.	<b>TOTAL ELECTRIC REVENUE</b>	<b>\$ 32,547,526</b>	<b>\$ 8,054,219</b>	<b>\$ 40,601,745</b>
4.	LOAD DISPATCH & SYSTEM CONTROL	1,834,547	544,290	2,378,837
5.	DIRECT ASSIGNMENT FACILITIES	1,939,125	(263,424)	1,675,701
6.	REGULATORY ASSET CHARGE	-	-	-
7.	OTHER OPERATING REVENUE	588,543	108,000	696,543
8.	ANCILLARY SERVICES FROM AEP CO	-	-	-
9.	SPECIAL CONTRACTS & OTHER	1,595,418	(513,958)	1,081,460
10.	<b>TOTAL OPERATING REVENUE</b>	<b>\$ 38,505,159</b>	<b>\$ 7,929,127</b>	<b>\$ 46,434,286</b>
<b>OPERATING EXPENSES:</b>				
11.	<b>OPERATIONS</b>			
12.	- ENERGY A/C 555	622	-	622
13.	A/C 556	3,469,178	(423,387)	3,045,791
14.	A/C 557	-	-	-
15.	<b>TRANSMISSION</b>			
16.	A/C 560	2,521,161	(337,059)	2,184,101
17.	A/C 561	76,139	-	76,139
18.	A/C 562	148,455	(19,367)	129,088
19.	A/C 563	307,468	(77,360)	230,108
20.	A/C 565	4,237,721	-	4,237,721
21.	A/C 566	55,095	-	55,095
22.	A/C 567	31,429	-	31,429
23.	<b>ADMINISTRATIVE &amp; GENERAL</b>	<b>4,991,383</b>	<b>(501,275)</b>	<b>4,490,108</b>
24.	<b>TOTAL OPERATIONS</b>	<b>\$ 15,838,651</b>	<b>\$ (1,358,450)</b>	<b>\$ 14,480,201</b>
25.	<b>MAINTENANCE</b>			
26.	A/C 568	1,314,923	(104,919)	1,210,004
27.	A/C 569	28,121	(5,661)	22,460
28.	A/C 570	1,309,941	(135,372)	1,174,569
29.	A/C 571	1,346,666	(228,205)	1,118,461
30.	A/C 573	104,998	(10,663)	94,335
31.	<b>GENERAL PLANT</b>	<b>274,321</b>	<b>-</b>	<b>274,321</b>
32.	<b>TOTAL MAINTENANCE</b>	<b>\$ 4,378,970</b>	<b>\$ (484,819)</b>	<b>\$ 3,894,150</b>

**Southwest Transmission Cooperative, Inc.**  
Adjusted Test Year End Income Statement

LINE NO.	RECL TEST YR 12/31/2011	PRO FORMA ADJUST. (b)	ADJ TEST YR 12/31/2011 (c)
OTHER:			
33. DEPRECIATION & AMORTIZATION	\$ 5,384,647	\$ (1,351,063)	\$ 4,033,584
34. ACC GROSS REVENUE TAXES	-	-	-
35. OTHER TAXES	2,022,230	-	2,022,230
36. TOTAL OTHER	7,406,877	(1,351,063)	6,055,814
37. TOTAL OPERATING EXPENSES	27,624,497	(3,194,332)	24,430,165
38. OPERATING INCOME (MARGINS)	10,880,662	11,123,459	22,004,121
INTEREST & OTHER DEDUCTIONS:			
39. LONG-TERM DEBT	5,348,025	(339,207)	5,008,818
40. INTEREST CHARGED TO CONSTR	(20,177)	-	(20,177)
41. OTHER INTEREST EXPENSE	7,631	-	7,631
42. OTHER DEDUCTIONS	174,178	-	174,178
43. TOTAL INTEREST EXPENSE	5,509,657	(339,207)	5,170,450
44. MARGIN AFTER INTEREST EXPENSE	5,371,005	11,462,666	16,833,671
OTHER NON OPERATING INCOME:			
45. INTEREST INCOME	181,178	-	181,178
46. AFUDC	-	-	-
47. OTHER NONOPERATING INCOME	126,602	-	126,602
48. TOTAL OTHER INCOME & DEDUC	307,780	-	307,780
49. EXTRAORDINARY ITEMS	-	-	-
50. NET INCOME (MARGINS)	\$ 5,678,785	\$ 11,462,666	\$ 17,141,451

SUPPORTING SCHEDULES:  
(a) E-2  
(b) C-2, Pages 3-8

RECAP  
(c) A-2



# Southwest Transmission Cooperative, Inc.

## Reclassification Adjustments

LINE NO.		RECLASSIFY AEP CO REVENUES (a)	RECLASSIFY PROP. TAXES ADJUST. (a)	TOTAL
REVENUES:				
1.	NETWORK TRANSMISSION SERVICE	\$ -	\$ -	\$ -
2.	POINT-TO-POINT	-	-	-
3.	TOTAL ELECTRIC REVENUE	-	-	-
4.	LOAD DISPATCH & SYSTEM CONTROL	-	-	-
5.	DIRECT ASSIGNMENT FACILITIES	-	-	-
6.	REGULATORY ASSET CHARGE	-	-	-
7.	OTHER OPERATING REVENUE	-	-	-
8.	ANCILLARY SERVICES FROM AEP	(812,643)	-	(812,643)
9.	SPECIAL CONTRACTS & OTHER	-	-	-
10.	TOTAL OPERATING REVENUE	(812,643)	-	(812,643)
OPERATING EXPENSES:				
11.	OPERATIONS			
12.	- ENERGY A/C 555	-	-	-
13.	A/C 556	-	(355)	(355)
14.	A/C 557	-	-	-
15.	TRANSMISSION			
16.	A/C 560	-	(44)	(44)
17.	A/C 561	-	-	-
18.	A/C 562	-	(841,063)	(841,063)
19.	A/C 563	-	(841,063)	(841,063)
20.	A/C 565	(812,643)	-	(812,643)
21.	A/C 566	-	(238,571)	(238,571)
22.	A/C 567	-	-	-
23.	ADMINISTRATIVE & GENERAL	-	(101,089)	(101,089)
24.	TOTAL OPERATIONS	(812,643)	(2,022,185)	(2,834,828)
25.	MAINTENANCE			
26.	A/C 568	-	(44)	(44)
27.	A/C 569	-	-	-
28.	A/C 570	-	-	-
29.	A/C 571	-	-	-
30.	A/C 573	-	-	-
31.	GENERAL PLANT	-	-	-
32.	TOTAL MAINTENANCE	\$ -	\$ (44)	\$ (44)

**Southwest Transmission Cooperative, Inc.**  
Reclassification Adjustments

LINE NO.		RECLASSIFY AEP CO REVENUES (a)	RECLASSIFY PROP. TAXES ADJUST. (a)	TOTAL
	OTHER:			
33.	DEPRECIATION & AMORTIZATION	\$ -	\$ -	\$ -
34.	ACC GROSS REVENUE TAXES	-	-	-
35.	OTHER TAXES	-	2,022,230	2,022,230
36.	TOTAL OTHER	-	2,022,230	2,022,230
37.	TOTAL OPERATING EXPENSES	(812,643)	-	(812,643)
38.	OPERATING INCOME (MARGINS)	-	-	-
	INTEREST & OTHER DEDUCTIONS:			
39.	LONG-TERM DEBT	-	-	-
40.	INTEREST CHARGED TO CONSTR	-	-	-
41.	OTHER INTEREST EXPENSE	-	-	-
42.	OTHER DEDUCTIONS	-	-	-
43.	TOTAL INTEREST EXPENSE	-	-	-
44.	MARGIN AFTER INTEREST EXPENSE	-	-	-
	OTHER NON OPERATING INCOME:			
45.	INTEREST INCOME	-	-	-
46.	AFUDC	-	-	-
47.	OTHER NON-OPERATING INCOME	-	-	-
48.	TOTAL OTHER INCOME & DEDUC	-	-	-
49.	EXTRAORDINARY ITEMS	-	-	-
50.	NET INCOME (MARGINS)	\$ -	\$ -	\$ -

SUPPORTING SCHEDULES:

RECAP SCHEDULE:  
(a) C-1

**Southwest Transmission Cooperative, Inc.**  
Pro Forma Adjustments

LINE NO.		1 Revenue AEP CO ED2 Point-to-Point Termination	2 Revenue AEP CO SRSG Point-to-Point Contract	3 Revenue Annualize CAWCD Sys Control & Disp Services	4 Revenue Remove CAWCD Non-Recurring Transmission
<b>REVENUES:</b>					
1.	NETWORK TRANSMISSION SERVICE	\$ -	\$ -	\$ -	\$ -
2.	POINT-TO -POINT	(346,368)	8,875,680		
3.	TOTAL ELECTRIC REVENUE	(346,368)	8,875,680	-	-
4.	LOAD DISPATCH & SYSTEM CONTROL	(23,520)	602,700		(35,600)
5.	DIRECT ASSIGNMENT FACILITIES	-	-	-	-
6.	REGULATORY ASSET CHARGE	-	-	-	-
7.	OTHER OPERATING REVENUE	-	-	108,000	-
8.	ANCILLARY SERVICES FROM AEP CO	-	-	-	-
9.	SPECIAL CONTRACTS & OTHER	-	-		(524,125)
10.	TOTAL OPERATING REVENUE	(369,888)	9,478,380	108,000	(559,725)
<b>OPERATING EXPENSES:</b>					
11.	OPERATIONS				
12.	- ENERGY A/C 555	-	-	-	-
13.	A/C 556	-	-	-	-
14.	A/C 557	-	-	-	-
15.	TRANSMISSION				
16.	A/C 560	-	-	-	-
17.	A/C 561	-	-	-	-
18.	A/C 562	-	-	-	-
19.	A/C 563	-	-	-	-
20.	A/C 565	-	-	-	-
21.	A/C 566	-	-	-	-
22.	A/C 567	-	-	-	-
23.	ADMINISTRATIVE & GENERAL	-	-	-	-
24.	TOTAL OPERATIONS	-	-	-	-
25.	MAINTENANCE				
26.	A/C 568	-	-	-	-
27.	A/C 569	-	-	-	-
28.	A/C 570	-	-	-	-
29.	A/C 571	-	-	-	-
30.	A/C 573	-	-	-	-
31.	GENERAL PLANT	-	-	-	-
32.	TOTAL MAINTENANCE	\$ -	\$ -	\$ -	\$ -

# Southwest Transmission Cooperative, Inc.

## Pro Forma Adjustments

LINE NO.		1	2	3	4
		Revenue	Revenue	Revenue	Revenue
		AEPCO ED2 Point-to-Point Termination	AEPCO SRSG Point-to-Point Contract	Annualize CAWCD Sys Control & Disp Services	Remove Non-Recurring Transmission
	OTHER:				
33.	DEPRECIATION & AMORTIZATION	\$ -	\$ -	\$ -	\$ -
34.	ACC GROSS REVENUE TAXES	-	-	-	-
35.	OTHER TAXES	-	-	-	-
36.	TOTAL OTHER	-	-	-	-
37.	TOTAL OPERATING EXPENSES	-	-	-	-
38.	OPERATING INCOME (MARGINS)	(369,888)	9,478,380	108,000	(559,725)
	INTEREST & OTHER DEDUCTIONS:				
39.	LONG-TERM DEBT	-	-	-	-
40.	INTEREST CHARGED TO CONSTR	-	-	-	-
41.	OTHER INTEREST EXPENSE	-	-	-	-
42.	OTHER DEDUCTIONS	-	-	-	-
43.	TOTAL INTEREST EXPENSE	-	-	-	-
44.	MARGIN AFTER INTEREST EXPENSE	(369,888)	9,478,380	108,000	(559,725)
	OTHER INCOME & DEDUCTIONS:				
45.	INTEREST INCOME	-	-	-	-
46.	AFUDC	-	-	-	-
47.	OTHER NONOPERATING INCOME	-	-	-	-
48.	TOTAL OTHER INCOME & DEDUC	-	-	-	-
49.	EXTRAORDINARY ITEMS	-	-	-	-
50.	NET INCOME (MARGINS)	\$ (369,888)	\$ 9,478,380	\$ 108,000	\$ (559,725)

SUPPORTING SCHEDULES:

RECAP SCHEDULE:  
(a) C-1

**Southwest Transmission Cooperative, Inc.**  
Pro Forma Adjustments

LINE NO.	5 Revenue AEP CO N-1 Point-to-Point Contract	6 Revenue Un-Designated Point-to-Point Contracts	7 Revenue Chemstar & Network Billing Adjustment	8 Payroll Adjustment	9 Sandario Transmission Line Designation Adjustment
<b>REVENUES:</b>					
1. NETWORK TRANSMISSION SERVICE	\$ -	\$ -	\$ 1,163	\$ -	\$ -
2. POINT-TO-POINT	865,920	(1,342,176)	-	-	-
3. TOTAL ELECTRIC REVENUE	865,920	(1,342,176)	1,163	-	-
4. LOAD DISPATCH & SYSTEM CONTROL	58,800	(58,090)	-	-	-
5. DIRECT ASSIGNMENT FACILITIES	-	-	-	-	(263,424)
6. REGULATORY ASSET CHARGE	-	-	-	-	-
7. OTHER OPERATING REVENUE	-	-	-	-	-
8. ANCILLARY SERVICES FROM AEP CO	-	-	-	-	-
9. SPECIAL CONTRACTS & OTHER	-	-	10,167	-	-
10. TOTAL OPERATING REVENUE	924,720	(1,400,266)	11,330	-	(263,424)
<b>OPERATING EXPENSES:</b>					
11. OPERATIONS					
12. - ENERGY A/C 555	-	-	-	-	-
13. A/C 556	-	-	-	(423,387)	-
14. A/C 557	-	-	-	-	-
15. TRANSMISSION					
16. A/C 560	-	-	-	(268,484)	-
17. A/C 561	-	-	-	-	-
18. A/C 562	-	-	-	(6,845)	-
19. A/C 563	-	-	-	(33,766)	-
20. A/C 565	-	-	-	-	-
21. A/C 566	-	-	-	-	-
22. A/C 567	-	-	-	-	-
23. ADMINISTRATIVE & GENERAL	-	-	-	(581,275)	-
24. TOTAL OPERATIONS	-	-	-	(1,313,759)	-
25. MAINTENANCE					
26. A/C 568	-	-	-	(104,919)	-
27. A/C 569	-	-	-	(5,661)	-
28. A/C 570	-	-	-	(105,775)	-
29. A/C 571	-	-	-	(108,407)	-
30. A/C 573	-	-	-	(10,663)	-
31. GENERAL PLANT	-	-	-	-	-
32. TOTAL MAINTENANCE	\$ -	\$ -	\$ -	(335,424)	\$ -

**Southwest Transmission Cooperative, Inc.**  
*Pro Forma Adjustments*

LINE NO.	5 Revenue AEP CO N-1 Point-to-Point Contract	6 Revenue Un-Designated Point-to-Point Contracts	7 Revenue Chemstar & Network Billing Adjustment	8 Payroll Adjustment	9 Sandario Transmission Line Designation Adjustment
OTHER:					
33. DEPRECIATION & AMORTIZATION	\$ -	\$ -	\$ -	\$ -	\$ -
34. ACC GROSS REVENUE TAXES	-	-	-	-	-
35. OTHER TAXES	-	-	-	-	-
36. TOTAL OTHER	-	-	-	-	-
37. TOTAL OPERATING EXPENSES	-	-	-	(1,649,183)	-
38. OPERATING INCOME (MARGINS)	924,720	(1,400,266)	11,330	1,649,183	(263,424)
INTEREST & OTHER DEDUCTIONS:					
39. LONG-TERM DEBT	-	-	-	-	-
40. INTEREST CHARGED TO CONSTR	-	-	-	-	-
41. OTHER INTEREST EXPENSE	-	-	-	-	-
42. OTHER DEDUCTIONS	-	-	-	-	-
43. TOTAL INTEREST EXPENSE	-	-	-	-	-
44. MARGIN AFTER INTEREST EXPENSE	924,720	(1,400,266)	11,330	1,649,183	(263,424)
OTHER INCOME & DEDUCTIONS:					
45. INTEREST INCOME	-	-	-	-	-
46. AFUDC	-	-	-	-	-
47. OTHER NONOPERATING INCOME	-	-	-	-	-
48. TOTAL OTHER INCOME & DEDUCT	-	-	-	-	-
49. EXTRAORDINARY ITEMS	-	-	-	-	-
50. NET INCOME (MARGINS)	\$ 924,720	\$ (1,400,266)	\$ 11,330	\$ 1,649,183	\$ (263,424)

SUPPORTING SCHEDULES:

RECAP SCHEDULE:  
(a) C-1

**Southwest Transmission Cooperative, Inc.**  
Pro Forma Adjustments

LINE NO.		10 Amortization of SWTC Rate Case Expenses Adjustment	11 Cost Cutting Adjustment	12 Annualize Depreciation Rates	13 CUT Refinancing Interest Adjustment	14 Annualize Interest on Long Term Debt	15 TOTAL ADJUSTMENTS
<b>REVENUES:</b>							
1.	NETWORK TRANSMISSION SERVICE	\$ -	\$ -	\$ -	\$ -	\$ -	1,163
2.	POINT-TO-POINT	-	-	-	-	-	8,053,056
3.	TOTAL ELECTRIC REVENUE	-	-	-	-	-	8,054,219
4.	LOAD DISPATCH & SYSTEM CONTROL	-	-	-	-	-	544,290
5.	DIRECT ASSIGNMENT FACILITIES	-	-	-	-	-	(263,424)
6.	REGULATORY ASSET CHARGE	-	-	-	-	-	-
7.	OTHER OPERATING REVENUE	-	-	-	-	-	108,000
8.	ANCILLARY SERVICES FROM AEP CO	-	-	-	-	-	-
9.	SPECIAL CONTRACTS & OTHER	-	-	-	-	-	(513,958)
10.	TOTAL OPERATING REVENUE	-	-	-	-	-	7,929,127
<b>OPERATING EXPENSES:</b>							
11.	OPERATIONS						
12.	- ENERGY A/C 555	-	-	-	-	-	-
13.	A/C 556	-	-	-	-	-	(423,387)
14.	A/C 557	-	-	-	-	-	-
15.	TRANSMISSION						
16.	A/C 560	-	(68,575)	-	-	-	(337,059)
17.	A/C 561	-	-	-	-	-	-
18.	A/C 562	-	(12,522)	-	-	-	(19,367)
19.	A/C 563	-	(43,594)	-	-	-	(77,360)
20.	A/C 565	-	-	-	-	-	-
21.	A/C 566	-	-	-	-	-	-
22.	A/C 567	-	-	-	-	-	-
23.	ADMINISTRATIVE & GENERAL	80,000	-	-	-	-	(501,275)
24.	TOTAL OPERATIONS	80,000	(124,691)	-	-	-	(1,358,450)
25.	MAINTENANCE						
26.	A/C 568	-	-	-	-	-	(104,919)
27.	A/C 569	-	-	-	-	-	(5,661)
28.	A/C 570	-	(29,597)	-	-	-	(135,372)
29.	A/C 571	-	(119,798)	-	-	-	(228,205)
30.	A/C 573	-	-	-	-	-	(10,663)
31.	GENERAL PLANT	-	-	-	-	-	-
32.	TOTAL MAINTENANCE	\$ -	\$ (149,395)	\$ -	\$ -	\$ -	(484,819)

**Southwest Transmission Cooperative, Inc.**  
Pro Forma Adjustments

LINE NO.	10 Amortization of SWTC Rate Case Expenses Adjustment	11 Cost Cutting Adjustment	12 Annualize Depreciation Rates	13 CUT Refinancing Interest Adjustment	14 Annualize Interest on Long Term Debt	15 TOTAL ADJUSTMENTS
<b>OTHER:</b>						
33. DEPRECIATION & AMORTIZATION	\$ -	\$ -	\$ (1,351,063)	\$ -	\$ -	\$ (1,351,063)
34. ACC GROSS REVENUE TAXES	-	-	-	-	-	-
35. OTHER TAXES	-	-	-	-	-	-
36. TOTAL OTHER	-	-	(1,351,063)	-	-	(1,351,063)
37. TOTAL OPERATING EXPENSES	80,000	(274,086)	(1,351,063)	-	-	(3,194,332)
38. OPERATING INCOME (MARGINS)	(80,000)	274,086	1,351,063	-	-	11,123,459
<b>INTEREST &amp; OTHER DEDUCTIONS:</b>						
39. LONG-TERM DEBT	-	-	-	(318,335)	(20,872)	(339,207)
40. INTEREST CHARGED TO CONSTR	-	-	-	-	-	-
41. OTHER INTEREST EXPENSE	-	-	-	-	-	-
42. OTHER DEDUCTIONS	-	-	-	-	-	-
43. TOTAL INTEREST EXPENSE	-	-	-	(318,335)	(20,872)	(339,207)
44. MARGIN AFTER INTEREST EXPENSE	(80,000)	274,086	1,351,063	318,335	20,872	11,462,666
<b>OTHER INCOME &amp; DEDUCTIONS:</b>						
45. INTEREST INCOME	-	-	-	-	-	-
46. AFUDC	-	-	-	-	-	-
47. OTHER NONOPERATING INCOME	-	-	-	-	-	-
48. TOTAL OTHER INCOME & DEDUCT	-	-	-	-	-	-
49. EXTRAORDINARY ITEMS	-	-	-	-	-	-
50. NET INCOME (MARGINS)	\$ (80,000)	\$ 274,086	\$ 1,351,063	\$ 318,335	\$ 20,872	\$ 11,462,666

SUPPORTING SCHEDULES:

RECAP SCHEDULE:  
(a) C-1



**Southwest Transmission Cooperative, Inc.**  
Computation Of Gross Revenue Conversion Factor

<u>LINE NO.</u>	<u>PERCENTAGE OF INCREMENTAL GROSS REVENUES</u>
1. FEDERAL INCOME TAX RATE	0.00000
2. STATE INCOME TAX RATE	0.00000
3. CORPORATION COMMISSION GROSS REVENUE TAX RATE	0.00000
4. TOTAL TAX PERCENTAGE	0.00000
5. OPERATING INCOME PERCENT	0.00000
6. GROSS REVENUE CONVERSION FACTOR (a)	0.00000

*D*

**Southwest Transmission Cooperative, Inc.**  
**Summary Cost of Capital**

**END OF ACTUAL TEST YEAR 12/31/2011**

<u>LINE NO.</u>	<u>INVESTED CAPITAL</u>	<u>AMOUNT</u>	<u>%</u>	<u>COST RATE</u>	<u>COMPOSITE</u>
		(b)			(b)
1.	LONG-TERM DEBT (a)	\$ 116,602,775	100.00%	4.563%	4.563%
2.	SHORT-TERM DEBT (a)	-	0.00%	0.000%	0.000%
3.	TOTAL	<u>\$ 116,602,775</u>	<u>100.00%</u>		<u>4.563%</u>

**END OF PROJECTED YEAR 12/31/2012**

	<u>INVESTED CAPITAL</u>	<u>AMOUNT</u>	<u>%</u>	<u>COST RATE</u>	<u>COMPOSITE</u>
		(b)			(b)
4.	LONG-TERM DEBT (a)	\$ 116,299,324	100.00%	4.294%	4.294%
5.	SHORT-TERM DEBT (a)	-	0.00%	0.000%	0.000%
6.	TOTAL	<u>\$ 116,299,324</u>	<u>100.00%</u>		<u>4.294%</u>

SUPPORTING SCHEDULES:

(a) D-2

RECAP SCHEDULES:

(b) A-3

**Southwest Transmission Cooperative, Inc.**  
**Cost Of Long-Term and Short-Term Debt**

LINE NO.	END OF TEST YEAR - 12/31/2011			END OF PROJECTED YEAR - 12/31/2012		
	OUTSTANDING	INTEREST RATE	ANNUAL INTEREST	OUTSTANDING	INTEREST RATE	ANNUAL INTEREST
1. FFB DEBT	\$ 96,931,001	4.79%	\$ 4,639,118	\$ 105,423,826	4.55%	\$ 4,792,161
2. CFC SERIES 1994A BONDS	6,515,426	1.00%	65,154	6,189,655	0.65%	40,233
3. CENTRAL BANK FOR COOPERATIVES	7,300,861	7.74%	565,087	-	7.74%	-
4. NRUCFC	5,855,487	3.40%	198,969	4,685,843	5.40%	253,036
5. REGULATORY ASSET			(148,000)			(91,000)
6. TOTAL LONG-TERM (a)	\$ 116,602,775		\$ 5,320,328	\$ 116,299,324		\$ 4,994,430
7. COST RATE (a)			4.563%			4.294%
SHORT TERM:						
8. SHORT-TERM DEBT	\$ -	0.00%	\$ -	\$ -	4.25%	\$ -
9. COST RATE (a)			0.000%			0.000%

RECAP SCHEDULES:  
(a) D-1

**Southwest Transmission Cooperative, Inc.**  
**Cost Of Long-Term and Short-Term Debt**

LINE NO.	EOY 12/31/2009			EOY 12/31/2010		
	OUTSTANDING (a)	INTEREST RATE	ANNUAL INTEREST	OUTSTANDING (a)	INTEREST RATE	ANNUAL INTEREST
1. FFB DEBT	\$ 95,317,210	4.635%	\$ 4,417,953	\$ 99,803,011	4.788%	\$ 4,778,568
2. REA DEBT	52,794	5.000%	2,640	-	0.000%	-
3. CFC SERIES 1994A BONDS	7,134,391	3.100%	221,166	6,841,197	1.480%	101,250
4. CENTRAL BANK FOR COOPERATIVES	9,350,288	7.740%	723,712	8,388,285	7.740%	649,253
5. NRUCFC	351,629	4.950%	17,406	248,534	4.950%	12,302
6. REGULATORY ASSET			(284,000)			(222,000)
7. TOTAL LONG-TERM (a)	\$ 112,206,312		\$ 5,098,877	\$ 115,281,027		\$ 5,319,373
8. COST RATE (a)			4.544%			4.614%
SHORT TERM:						
9. SHORT-TERM DEBT	\$ -		\$ -	\$ -		0.00%
10. COST RATE (a)			0.00%			0.00%

RECAP SCHEDULES:  
(a) A-3

**Southwest Transmission Cooperative, Inc.**  
Cost Of Preferred Stock

**THIS SCHEDULE IS NOT APPLICABLE**

**Southwest Transmission Cooperative, Inc.**  
Cost Of Common Stock

**THIS SCHEDULE IS NOT APPLICABLE**

E



**Southwest Transmission Cooperative, Inc.**  
Comparative Balance Sheets

LINE NO.	ASSETS	TEST YEAR 12/31/2011	PRIOR YEAR 12/31/2010	PRIOR YEAR 12/31/2009
	UTILITY PLANT: (a)			
1.	UTILITY PLANT IN SERVICE	\$ 176,523,839	\$ 176,622,100	\$ 173,936,980
2.	LESS: ACCUMULATED DEPRECIATION	(81,751,923)	(76,810,842)	(71,852,523)
3.	NET UTILITY PLANT IN SERVICE	94,771,916	99,811,258	102,084,457
4.	CONSTRUCTION WORK IN PROGRESS	8,948,097	6,599,089	8,141,691
5.	PLANT HELD FOR FUTURE USE	377,214	377,214	377,214
6.	NET UTILITY PLANT	104,097,227	106,787,561	110,603,362
	CURRENT ASSETS:			
7.	GENERAL FUND CASH	618,237	739,921	185,904
8.	TEMPORARY INVESTMENTS	11,818,567	6,611,561	2,956,824
9.	ACCOUNTS RECEIVABLE	3,354,133	3,345,156	3,178,862
10.	FUEL INVENTORY	-	-	-
11.	MATERIALS AND SUPPLIES	4,152,990	2,176,168	2,175,468
12.	PREPAYMENTS & OTHER CURRENT ASSETS	1,764,102	2,080,350	2,439,975
13.	NOTES RECEIVABLE-CURRENT	-	-	-
14.	OTHER	17,791	17,100	16,176
15.	TOTAL CURRENT ASSETS	21,725,820	14,970,256	10,953,209
	OTHER ASSETS:			
16.	INV - ASSOC ORG	3,194,597	2,395,739	2,376,300
17.	INVESTMENTS	65,647	139,670	90,522
18.	DEFERRED DEBITS	2,094,640	1,998,847	1,790,532
19.	UNAMORTIZED DEBT	556,574	722,991	922,764
20.	REGULATORY ASSETS	-	-	-
21.	TOTAL OTHER ASSETS	5,911,458	5,257,247	5,180,118
22.	TOTAL ASSETS	\$ 131,734,505	\$ 127,015,064	\$ 126,736,689

SUPPORTING SCHEDULES:  
(a) E-5, Page 2

RECAP SCHEDULES:

**Southwest Transmission Cooperative, Inc.**  
Comparative Balance Sheets

LINE NO.	LIABILITIES & EQUITY	TEST YEAR 12/31/2011	PRIOR YEAR 12/31/2010	PRIOR YEAR 12/31/2009
	<b>EQUITY: (a) (c)</b>			
23.	PATRONAGE CAPITAL	\$ 9,439,164	\$ 9,439,164	\$ 9,398,678
24.	UNALLOCATED MARGINS	5,003,245	(675,613)	40,487
25.	<b>TOTAL EQUITY</b>	<b>14,442,409</b>	<b>8,763,551</b>	<b>9,439,165</b>
	<b>LONG-TERM DEBT: (b)</b>			
26.	FFB DEBT	96,931,001	99,803,011	95,317,210
27.	REA DEBT	-	-	52,794
28.	PAYMENTS UNAPPLIED	(4,119,806)	(1,513,001)	(57,153)
29.	CFC 1994A BONDS	6,515,426	6,841,197	7,134,391
30.	COOPERATIVE UTILITY TRUST	7,300,861	8,388,285	9,350,288
31.	NRUCFC	5,855,487	248,534	351,629
32.	LESS: CURRENT MATURITIES	(4,936,841)	(3,949,503)	(4,237,808)
33.	<b>TOTAL LONG-TERM DEBT</b>	<b>107,546,128</b>	<b>109,818,523</b>	<b>107,911,351</b>
	<b>CURRENT LIABILITIES:</b>			
34.	MEMBER ADVANCES & NOTES	-	-	-
35.	ACCOUNTS PAYABLE	1,265,604	1,291,303	1,678,211
36.	ACCRUED TAXES	1,009,993	899,942	849,814
37.	ACCRUED INTEREST	1,428,399	1,468,848	339,987
38.	CURRENT LIABILITY - OTHER	621,096	393,056	1,760,688
39.	CURRENT MATURITIES OF LONG TERM DEBT	4,936,841	3,949,503	4,237,808
40.	<b>TOTAL CURRENT LIABILITIES</b>	<b>9,261,933</b>	<b>8,002,652</b>	<b>8,866,508</b>
41.	ACCUMULATED OPERATING PROVISIONS	-	-	-
42.	DEFERRED CREDITS	484,035	430,338	519,665
43.	<b>TOTAL LIABILITIES AND EQUITY</b>	<b>\$ 131,734,505</b>	<b>\$ 127,015,064</b>	<b>\$ 126,736,689</b>

SUPPORTING SCHEDULES:  
(a) E-4  
(b) D-2, D-2A & General Ledger

RECAP SCHEDULES:  
(c) A-3, Line 5

**Southwest Transmission Cooperative, Inc.**  
Comparative Income Statements

LINE NO.		TEST YEAR 12/31/2011	PRIOR YEAR 12/31/2010	PRIOR YEAR 12/31/2009
<b>REVENUES:</b>				
1.	CLASS A & NETWORK MEMBERS	\$ 26,139,718	\$ 19,970,590	\$ 19,916,226
2.	POINT-TO -POINT	6,407,808	8,531,217	8,281,513
3.	NON-CLS A, NON-FIRM & NON-MEM	6,181,733	5,470,226	
4.	TOTAL ELECTRIC REVENUE	38,729,259	33,972,033	34,373,540
5.	OTHER OPERATING REVENUE	588,543	570,570	883,405
6.	TOTAL OPERATING REVENUE	39,317,802	34,542,603	35,256,945
<b>OPERATING EXPENSES:</b>				
<b>OPERATIONS</b>				
7.	- ENERGY A/C 555	622	-	-
8.	A/C 556	3,469,533	3,939,714	4,799,509
9.	A/C 557	-	-	-
10.	TRANSMISSION			
11.	A/C 560	2,521,205	2,995,011	3,349,705
12.	A/C 561	76,139	76,008	50,069
13.	A/C 562	989,518	881,155	915,894
14.	A/C 563	1,148,531	943,405	972,945
15.	A/C 565	5,050,364	5,259,493	5,381,913
16.	A/C 566	293,666	211,704	202,284
17.	A/C 567	31,429	35,420	3,012
18.	ADMINISTRATIVE & GENERAL	5,092,472	4,897,520	4,295,706
19.	TOTAL OPERATIONS	18,673,479	19,239,430	19,971,037
20.	MAINTENANCE			
21.	A/C 568	1,314,967	1,711,780	1,983,115
22.	A/C 569	28,121	91,014	17,939
23.	A/C 570	1,309,941	1,087,457	967,851
24.	A/C 571	1,346,666	1,339,613	1,321,933
25.	A/C 573	104,998	149,349	391,185
26.	GENERAL PLANT	274,321	362,371	274,206
27.	TOTAL MAINTENANCE	\$ 4,379,014	\$ 4,741,584	\$ 4,956,229

**Southwest Transmission Cooperative, Inc.**  
Comparative Income Statements

LINE NO.		TEST YEAR 12/31/2011	PRIOR YEAR 12/31/2010	PRIOR YEAR 12/31/2009
	OTHER:			
28.	DEPRECIATION & AMORTIZATION	\$ 5,384,647	\$ 5,432,523	\$ 4,983,058
29.	ACC GROSS REVENUE TAXES	-	-	-
30.	OTHER TAXES	-	-	-
31.	TOTAL OTHER	5,384,647	5,432,523	4,983,058
32.	TOTAL OPERATING EXPENSES	28,437,140	29,413,537	29,910,324
33.	OPERATING INCOME (MARGINS)	10,880,662	5,129,066	5,346,621
	INTEREST & OTHER DEDUCTIONS:			
34.	LONG-TERM DEBT	5,348,025	5,362,331	5,222,239
35.	INTEREST CHARGED TO CONSTR	(20,177)	(21,005)	(114,986)
36.	OTHER INTEREST EXPENSE	7,631	(469)	56,056
37.	OTHER DEDUCTIONS	174,178	658,787	255,732
38.	TOTAL INTEREST EXPENSES	5,509,657	5,999,644	5,419,041
39.	MARGIN AFTER INTEREST EXPENSE	5,371,005	(870,578)	(72,420)
	OTHER INCOME & DEDUCTIONS:			
40.	INTEREST INCOME	181,178	81,310	72,362
41.	AFUDC	-	-	-
42.	OTHER NONOPERATING INCOME	126,602	112,860	40,545
43.	TOTAL OTHER INCOME & DEDUCT	307,780	194,170	112,907
43a.	EXTRAORDINARY ITEMS	-	-	-
44.	NET INCOME (MARGINS)	\$ 5,678,785	\$ (676,408)	\$ 40,487

**Southwest Transmission Cooperative, Inc.**  
Comparative Statement of Changes in Financial Position

LINE NO.	TEST YEAR 12/31/2011	PRIOR YEAR 12/31/2010	PRIOR YEAR 12/31/2009
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
1. NET MARGIN (LOSS)	\$ 5,678,785 (a)	\$ (676,408)	\$ 40,487
ADJUSTMENTS TO RECONCILE NET MARGIN TO NET CASH FLOWS PROVIDED BY OPERATING ACTIVITIES-			
2. DEPREC. & AMORT.	5,384,647	5,430,170	4,983,059
<b>CHANGES IN ASSETS AND LIABILITIES</b>			
3. RECEIVABLES	4,920	(165,792)	(243,100)
4. INVENTORIES	(1,976,822)	(700)	(155,274)
5. DEFERRED DEBITS	347,662	268,493	(438,848)
6. ACCRUED PROPERTY TAXES	110,050	50,129	8,140
7. ACCOUNTS PAYABLE	(186,879)	(438,675)	(5,220,912)
8. ACCRUED INTEREST PAYABLE	(40,449)	1,128,861	(12,494)
9. DEFERRED CREDITS	-	-	-
10. OTHER, NET	444,236	(1,187,644)	615,336
11. NET CASH PROVIDED BY OPERATING ACTIVITIES	9,766,150 (b)	4,408,434	(423,606)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
12. CONSTRUCTION EXPENDITURES, NET	(2,694,311)	(1,614,371)	(11,175,627)
13. PROCEEDS FROM SALE OF ASSETS	-	-	370,000
14. MATURITY/PURCHASE OF INVESTMENTS	(724,913)	(68,587)	5,000
15. PATRONAGE CAPITAL RETIREMENT	-	-	-
16. NET CASH USED IN INVESTING ACTIVITIES	(3,419,224) (b)	(1,682,958)	(10,800,627)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
17. MEMBER ADVANCES, NET	16,409	(186,728)	35,417
18. ISSUANCE OF LONG-TERM DEBT	6,008,500	6,683,000	17,814,000
19. RETIREMENT OF LONG-TERM DEBT	(7,293,557)	(5,064,133)	(4,112,001)
20. MEMBERSHIPS ISSUED	-	-	-
21. NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES	(1,268,648) (b)	1,432,139	13,737,416
22. NET DECREASE IN CASH AND CASH EQ.	5,078,278 (b)	4,157,615	2,513,183
23. CASH AND CASH EQUIVALENTS, Beginning of Year	7,191,267	3,033,652	520,469
24. CASH AND CASH EQUIVALENTS, End of Year	\$ 12,269,545	\$ 7,191,267	\$ 3,033,652
<b>SUPPLEMENTAL DISCLOSURES:</b>			
25. CASH PAID FOR INTEREST, NET OF AMOUNT CAPITALIZED	\$ -	\$ 4,211,996	\$ 5,175,802

SUPPORTING SCHEDULES:  
(a) C-1, Page 4

RECAP SCHEDULES:  
(b) A-5

**Southwest Transmission Cooperative, Inc.**  
Statement of Change in Equity

<u>LINE NO.</u>	<u>PATRONAGE CAPITAL</u>	<u>UNALLOCATED LOSSES</u>
1. BALANCE, DECEMBER 31, 2008	\$ 5,025,614	\$ 4,373,069
2. MARGINS ALLOCATED	4,373,064	(4,373,069)
3. NET EARNINGS (LOSS)		40,487 (a)
4.		
5. BALANCE, DECEMBER 31, 2009	9,398,678 (b)	40,487 (b)
6. MARGINS ALLOCATED	40,486	(39,692)
7. NET EARNINGS (LOSS)	-	(676,408) (a)
8.		
9. BALANCE, DECEMBER 31, 2010	9,439,164 (b)	(675,613) (b)
10. MARGINS ALLOCATED	-	73
11. NET EARNINGS (LOSS)	-	5,678,785 (a)
12.		
13. BALANCE, DECEMBER 31, 2011	<u>\$ 9,439,164</u>	<u>\$ 5,003,245</u>

SUPPORTING SCHEDULES:  
(a) E-2, Page 2

RECAP SCHEDULES:  
(b) E-1, Page 2

**Southwest Transmission Cooperative, Inc.**  
Detail of Utility Plant

LINE NO.		END OF PRIOR YEAR 12/31/2010 /1	NET ADDITIONS	END OF TEST YEAR 12/31/2011 /2	PRO FORMA ADJUSTMENT (a)	ADJUSTED END OF TEST YEAR
<b>INTANGIBLE PLANT:</b>						
1.	301 ORGANIZATION	\$ 1,515	\$ -	\$ 1,515	\$ -	\$ 1,515
2.	114 ACQUISITION ADJUSTMENT	4,413	-	4,413	(4,413)	-
3.	302 FRANCHISE AND CONSENT	248	-	248	-	248
4.	303 MISC. INTANGIBLE PLANT	4,386,151	2	4,386,153	-	4,386,153
5.	SUBTOTAL INTANGIBLE	4,392,327	2	4,392,329 (d)	(4,413)	4,387,916
<b>TRANSMISSION PLANT:</b>						
6.	350 LAND AND LAND RIGHTS	2,265,891	35,457	2,301,348	-	2,301,348
7.	352 STRUCTURES AND IMPROVEMENTS	5,190,991	380,353	5,571,344	-	5,571,344
8.	353 STATION EQUIPMENT	62,402,894	20,140,002	82,542,896	-	82,542,896
9.	354 TOWERS & FIXTURES	8,237,417	-	8,237,417	-	8,237,417
10.	355 POLES & FIXTURES	29,008,233	5,689,605	34,697,838	-	34,697,838
11.	356 OVERHEAD CONDUCTORS & DEVICES	18,185,616	2,745,733	20,931,349	-	20,931,349
12.	359 ROADS & TRAILS	221,939	85,911	307,850	-	307,850
13.	SUBTOTAL TRANSMISSION PLANT	125,512,981	29,077,061	154,590,042 (d)	-	154,590,042
<b>GENERAL PLANT:</b>						
14.	389 LAND AND LAND RIGHTS	3,436	-	3,436	-	3,436
15.	390 STRUCTURES AND IMPROVEMENTS	437,496	-	437,496	-	437,496
16.	391 OFFICE FURNITURE & EQUIPMENT	-	-	-	-	-
17.	392 TRANSPORTATION EQUIPMENT	1,587,502	(177,697)	1,409,805	-	1,409,805
18.	393 STORES EQUIPMENT	-	-	-	-	-
19.	394 TOOLS, SHOP & GARAGE EQUIPMENT	-	-	-	-	-
20.	395 LABORATORY EQUIPMENT	108,263	9,310	117,573	-	117,573
21.	396 POWER OPERATED EQUIPMENT	2,574,322	(4,156)	2,570,166	-	2,570,166
22.	397 COMMUNICATION EQUIPMENT	12,907,117	95,875	13,002,992	-	13,002,992
23.	398 MISCELLANEOUS EQUIPMENT	-	-	-	-	-
24.	399 OTHER TANGIBLE PLANT	-	-	-	-	-
25.	SUBTOTAL GENERAL PLANT	\$ 17,618,136	\$ (76,668)	\$ 17,541,468 (d)	\$ -	\$ 17,541,468

**Southwest Transmission Cooperative, Inc.**  
Detail of Utility Plant

LINE NO.	END OF PRIOR YEAR 12/31/2010 /1	NET ADDITIONS	END OF TEST YEAR 12/31/2011 /2	PRO FORMA ADJUSTMENT (a)	ADJUSTED END OF TEST YEAR
<b>COMPLETED CONST - UNCLASSIFIED:</b>					
26. GENERAL PLANT	\$ -	\$ -	\$ -	\$ -	\$ -
27. LINES		-		-	-
28. SUBSTATION	29,098,653	(29,098,653)	-	-	-
29. GENERATION - STEAM		-		-	-
30. TOTAL COMPLETED	29,098,653 (b)	(29,098,653)	- (b)	-	-
31. TOTAL PLANT IN SERVICE	176,622,097 (c)	(98,260) (c)	176,523,839 (c) (d)	(4,413) (d)	176,519,426 (d)
<b>ACCUMULATED DEPRECIATION:</b>					
32. LINES	(64,525,668)	(5,872,174)	(70,397,842)	656,952	(69,740,890)
33. SUBSTATION		-		694,111	694,111
34. GENERAL PLANT	(10,130,204)	1,057,143	(9,073,061)	-	(9,073,061)
35. RETIREMENTS	(22,323)	16,095	(6,228)	6,228	-
35. TOTAL	(74,678,195)	(4,798,936)	(79,477,131)	1,357,291	(78,119,840)
36. ACCUMULATED AMORTIZATION	(2,132,647)	(142,145)	(2,274,792)	-	(2,274,792)
37. TOTAL ACCUM DEPREC. & AMORT.	(76,810,842) (b)	(4,941,081)	(81,751,923) (b)	1,357,291 (d)	(80,394,632) (d)
38. NET PLANT IN SERVICE	99,811,255	(4,941,081)	94,771,916 (d)	1,352,878	96,124,794
39. CWIP	6,599,089 (b)	2,349,008	8,948,097 (b)		8,948,097
40. PLANT HELD FOR FUTURE USE	377,214	-	377,214	(377,214)	-
41. TOTAL NET PLANT	\$ 106,787,561	\$ (2,690,334)	\$ 104,097,227	\$ 975,664	\$ 105,072,891

SUPPORTING SCHEDULES:  
(a) E-5, Pages 3-4

/1 From General Ledger Balance Sheet  
/2 From General Ledger Balance Sheet

RECAP SCHEDULES:  
(b) E-1, Page 1  
(c) A-4  
(d) B-2



# Southwest Transmission Cooperative, Inc.

## Detail of Utility Plant Pro Forma Adjustments

LINE NO.		Acquisition Adjustment	Plant Held for Future Use Adjustment	Retirement Adjustment	Depreciation Adjustment	TOTAL (a)
	INTANGIBLE PLANT:					
1.	301 ORGANIZATION	\$ -	\$ -	\$ -	\$ -	\$ -
2.	114 ACQUISITION ADJUSTMENT	(4,413)	-	-	-	(4,413)
3.	302 FRANCHISE AND CONSENT	-	-	-	-	-
4.	303 MISC. INTANGIBLE PLANT	-	-	-	-	-
5.	SUBTOTAL INTANGIBLE	(4,413)	-	-	-	(4,413)
	TRANSMISSION PLANT:					
6.	350 LAND AND LAND RIGHTS	-	-	-	-	-
7.	352 STRUCTURES AND IMPROVEMENTS	-	-	-	-	-
8.	353 STATION EQUIPMENT	-	-	-	-	-
9.	354 TOWERS & FIXTURES	-	-	-	-	-
10.	355 POLES & FIXTURES	-	-	-	-	-
11.	356 OVERHEAD CONDUCTORS & DEVICES	-	-	-	-	-
12.	359 ROADS & TRAILS	-	-	-	-	-
13.	SUBTOTAL TRANSMISSION PLANT	-	-	-	-	-
	GENERAL PLANT:					
14.	389 LAND AND LAND RIGHTS	-	-	-	-	-
15.	390 STRUCTURES AND IMPROVEMENTS	-	-	-	-	-
16.	391 OFFICE FURNITURE & EQUIPMENT	-	-	-	-	-
17.	392 TRANSPORTATION EQUIPMENT	-	-	-	-	-
18.	393 STORES EQUIPMENT	-	-	-	-	-
19.	394 TOOLS, SHOP & GARAGE EQUIPMENT	-	-	-	-	-
20.	395 LABORATORY EQUIPMENT	-	-	-	-	-
21.	396 POWER OPERATED EQUIPMENT	-	-	-	-	-
22.	397 COMMUNICATION EQUIPMENT	-	-	-	-	-
23.	398 MISCELLANEOUS EQUIPMENT	-	-	-	-	-
24.	399 OTHER TANGIBLE PLANT	-	-	-	-	-
25.	SUBTOTAL GENERAL PLANT	\$ -	\$ -	\$ -	\$ -	\$ -

# Southwest Transmission Cooperative, Inc.

## Detail of Utility Plant Pro Forma Adjustments

LINE NO.	Acquisition Adjustment	Plant Held for Future Use Adjustment	Retirement Adjustment	Depreciation Adjustment	TOTAL (a)
<b>COMPLETED CONST - UNCLASSIFIED:</b>					
26. GENERAL PLANT	\$ -	\$ -	\$ -	\$ -	\$ -
27. LINES	-	-	-	-	-
28. SUBSTATION	-	-	-	-	-
29. GENERATION - STEAM	-	-	-	-	-
30. TOTAL COMPLETED	-	-	-	-	-
31. TOTAL PLANT IN SERVICE	(4,413)	-	-	-	(4,413)
<b>ACCUMULATED DEPRECIATION:</b>					
32. LINES	-	-	-	656,952	656,952
33. SUBSTATION	-	-	-	694,111	694,111
34. GENERAL PLANT	-	-	-	-	-
35. RETIREMENTS	-	-	6,228	-	6,228
35. TOTAL	-	-	6,228	1,351,063	1,357,291
36. ACCUMULATED AMORTIZATION	-	-	-	-	-
37. TOTAL ACCUM DEPREC. & AMORT.	-	-	6,228	1,351,063	1,357,291
38. NET PLANT IN SERVICE	(4,413)	-	6,228	1,351,063	1,352,878
39. CWIP	-	-	-	-	-
40. PLANT HELD FOR FUTURE USE	-	(377,214)	-	-	(377,214)
41. TOTAL NET PLANT	\$ (4,413)	\$ (377,214)	\$ 6,228	\$ 1,351,063	\$ 975,664

RECAP SCHEDULES:  
(a) E-5, Pages 1-2

**Southwest Transmission Cooperative, Inc.**  
**Statement of Change in Equity**

**THIS SCHEDULE IS NOT APPLICABLE**

# Southwest Transmission Cooperative, Inc.

## Operating Statistics

LINE NO.	<u>ELECTRIC STATISTICS</u>	<u>TEST YEAR ENDED 12/31/2011</u>	<u>PRIOR YEAR ENDED 12/31/2010</u>	<u>PRIOR YEAR ENDED 12/31/2009</u>
	KW SALES:			
1.	CLASS A MEMBERS	5,335,818	5,804,001	5,040,705
2.	CLASS B MEMBERS	1,176,000	1,776,000	1,776,000
3.	OTHER FIRM CONTRACTS	<u>335,708</u>	<u>343,501</u>	<u>345,671</u>
4.	TOTAL	6,847,526	7,923,502	7,162,376
	AVERAGE NO. CUSTOMERS:			
5.	CLASS A MEMBERS	6	6	6
6.	CLASS B MEMBERS	1	1	1
7.	OTHER FIRM CONTRACTS	<u>3</u>	<u>3</u>	<u>3</u>
8.	TOTAL	10	10	10
	AVERAGE KW USE:			
9.	CLASS A MEMBERS	889,303	967,334	840,118
10.	CLASS B MEMBERS	1,176,000	1,776,000	1,776,000
11.	OTHER FIRM CONTRACTS	<u>111,903</u>	<u>114,500</u>	<u>115,224</u>
12.	ALL CLASSES AVERAGE	684,753	792,350	716,238

# Southwest Transmission Cooperative, Inc.

## Taxes Charged to Operations

LINE NO.	DESCRIPTION	TEST YEAR ENDED 12/31/2011	PRIOR YEAR ENDED 12/31/2010	PRIOR YEAR ENDED 12/31/2009
	<b>FEDERAL TAXES:</b>			
1.	PAYROLL	\$ 672,320	\$ 967,031	\$ 1,149,337
2.	FEDERAL INCOME	-	-	-
	<b>TOTAL FEDERAL TAXES</b>	<b>672,320</b>	<b>967,031</b>	<b>1,149,337</b>
	<b>STATE TAXES:</b>			
3.	PAYROLL	89,524	124,466	164,940
4.	PROPERTY	2,022,230	1,781,220	1,701,615
5.	GROSS REVENUE	50	50	50
6.	CALIFORNIA FRANCHISE TAX	835	800	859
	<b>TOTAL STATE TAXES</b>	<b>2,112,639</b>	<b>1,906,536</b>	<b>1,867,464</b>
7.	<b>TOTAL TAXES</b>	<b>\$ 2,784,959</b>	<b>\$ 2,873,567</b>	<b>\$ 3,016,801</b>

**Southwest Transmission Cooperative, Inc.**  
Notes to Financial Statements

SEE FINANCIAL STATEMENTS

F

**Southwest Transmission Cooperative, Inc.**  
Projected Income Statement  
Present and Proposed Rates

LINE NO.		-ACTUAL-	-PROJECTED YEAR-	
		TEST YEAR	PRESENT RATES	PROPOSED RATES
		ENDED	ENDED	ENDED
		12/31/2011 (a)	12/31/2011 (b)	12/31/2011 (b)
REVENUES:				
1.	NETWORK TRANSMISSION SERVICE	\$ 26,139,718	\$ 26,140,881	\$ 18,591,510
2.	POINT-TO -POINT	6,407,808	14,460,864	10,252,464
3.	TOTAL ELECTRIC REVENUE	32,547,526	40,601,745	28,843,974
4.	LOAD DISPATCH & SYSTEM CONTROL	1,834,547	2,378,837	1,679,751
5.	DIRECT ASSIGNMENT FACILITIES	1,939,125	1,675,701	1,675,701
6.	REGULATORY ASSET CHARGE	-	-	-
7.	OTHER OPERATING REVENUE	588,543	696,543	696,543
8.	ANCILLARY SERVICES FROM AEP CO	812,643	-	-
9.	SPECIAL CONTRACTS & OTHER	1,595,418	1,081,460	781,105
10.	TOTAL OPERATING REVENUE	39,317,802	46,434,286	33,677,073
OPERATING EXPENSES:				
11.	OPERATIONS			
12.	- ENERGY A/C 555	622	622	622
13.	A/C 556	3,469,533	3,045,791	3,045,791
14.	A/C 557	-	-	-
15.	TRANSMISSION			
16.	A/C 560	2,521,205	2,184,101	2,184,101
17.	A/C 561	76,139	76,139	76,139
18.	A/C 562	989,518	129,088	129,088
19.	A/C 563	1,148,531	230,108	230,108
20.	A/C 565	5,050,364	4,237,721	4,237,721
21.	A/C 566	293,666	55,095	55,095
22.	A/C 567	31,429	31,429	31,429
23.	ADMINISTRATIVE & GENERAL	5,092,472	4,490,108	4,490,108
24.	TOTAL OPERATIONS	18,673,479	14,480,201	14,480,201
25.	MAINTENANCE			
26.	A/C 568	1,314,967	1,210,004	1,210,004
27.	A/C 569	28,121	22,460	22,460
28.	A/C 570	1,309,941	1,174,569	1,174,569
29.	A/C 571	1,346,666	1,118,461	1,118,461
30.	A/C 573	104,998	94,335	94,335
31.	GENERAL PLANT	274,321	274,321	274,321
32.	TOTAL MAINTENANCE	\$ 4,379,014	\$ 3,894,150	\$ 3,894,150



# Southwest Transmission Cooperative, Inc.

## Projected Income Statement Present and Proposed Rates

LINE NO.		-ACTUAL-	-PROJECTED YEAR-					
		TEST YEAR	PRESENT RATES	PROPOSED RATES				
		ENDED	ENDED	ENDED				
		12/31/2011	(a)	12/31/2011	(b)	12/31/2011	(b)	
OTHER:								
33.	DEPRECIATION & AMORTIZATION	\$	5,384,647		\$	4,033,584	\$	4,033,584
34.	ACC GROSS REVENUE TAXES		-			-		-
35.	OTHER TAXES		-			2,022,230		2,022,230
36.	TOTAL OTHER		5,384,647			6,055,814		6,055,814
37.	TOTAL OPERATING EXPENSES		28,437,140			24,430,165		24,430,165
38.	OPERATING INCOME (MARGINS)		10,880,662			22,004,121		9,246,908
INTEREST & OTHER DEDUCTIONS:								
39.	LONG-TERM DEBT		5,348,025			5,008,818		5,008,818
40.	INTEREST CHARGED TO CONSTR		(20,177)			(20,177)		(20,177)
41.	OTHER INTEREST EXPENSE		7,631			7,631		7,631
42.	OTHER DEDUCTIONS		174,178			174,178		174,178
43.	TOTAL INTEREST EXPENSE		5,509,657			5,170,450		5,170,450
44.	MARGIN AFTER INTEREST EXPENSE		5,371,005			16,833,671		4,076,458
OTHER INCOME & DEDUCTIONS:								
45.	INTEREST INCOME		181,178			181,178		181,178
46.	AFUDC		-			-		-
47.	OTHER NONOPERATING INCOME		126,602			126,602		126,602
48.	TOTAL OTHER INCOME & DEDUC		307,780			307,780		307,780
49.	EXTRAORDINARY ITEMS		-			-		-
50.	NET INCOME (MARGINS)	\$	5,678,785		\$	17,141,451		\$ 4,384,238

SUPPORTING SCHEDULES:  
(a) E-2

RECAP SCHEDULES:  
(b) A-2

# Southwest Transmission Cooperative, Inc.

Projected Changes in Financial Position  
Present And Proposed Rates

LINE NO.	-ACTUAL- TEST YEAR ENDED 12/31/2011 (a)	PRESENT RATES ENDED 12/31/2011 (b)	-PROJECTED YEAR- PROPOSED RATES ENDED 12/31/2011 (b)
1. NET CASH PROVIDED BY OPERATING ACTIVITIES	\$ 9,766,150	\$ 22,579,879	\$ 9,822,666
2. NET CASH USED IN INVESTING ACTIVITIES	(3,419,224)	(3,419,224)	(3,419,224)
3. NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES	<u>(1,268,648)</u>	<u>(1,268,648)</u>	<u>(1,268,648)</u>
4. NET DECREASE IN CASH AND CASH EQ.	<u>\$ 5,078,278</u>	<u>\$ 17,892,007</u>	<u>\$ 5,134,794</u>

SUPPORTING SCHEDULES:  
(a) E-3

RECAP SCHEDULES:  
(b) A-5

**Southwest Transmission Cooperative, Inc.**  
**Projected Construction Requirements**

<u>LINE NO.</u>	<u>-ACTUAL- TEST YEAR ENDED 12/31/2011</u>	<u>YEAR ENDED 12/31/2012</u>	<u>-PROJECTED YEAR- YEAR ENDED 12/31/2013</u>	<u>YEAR ENDED 12/31/2014</u>
1. TRANSMISSION PLANT	\$ 2,770,979	\$ 9,360,000	\$ 4,965,000	\$ 4,061,000
2. GENERAL PLANT	(76,668)	201,000	154,000	158,000
3. TOTAL PLANT (a)	<u>\$ 2,694,311</u>	<u>\$ 9,561,000</u>	<u>\$ 5,119,000</u>	<u>\$ 4,219,000</u>

SUPPORTING SCHEDULES:

RECAP SCHEDULES:  
(a) A-4

**Southwest Transmission Cooperative, Inc.**  
**Assumptions Used in Developing Projections**

<b>LINE NO.</b>		
1.	DSCR GOAL	1.35
2.	AVERAGE NETWORK TRANSMISSION RATE	\$ 3.738 \$/kW/Mo.
3.	ANNUAL NETWORK REVENUE REQUIREMENT	\$ 18,848,758
4.	POINT- TO- POINT TRANS. RATE	\$ 2.558 \$/kW/Mo.
5.	SYSTEM CONTROL & LOAD DISPATCH	\$ 0.173 \$/kW/Mo.
6.	FFB INTEREST RATE	4.50%
7.	STAFFING LEVELS	47
8.	PROPERTY TAXES	2011 Billings
9.	DEPRECIATION RATES:	
	TRANSMISSION	2.75%
	HEADQUARTERS	2.00%
	GENERAL PLANT	6.00%
	VEHICLES	3-10 YEARS MINUS SALVAGE
	COMMUNICATIONS	6.00%
	SYS. CONTROL & MICROWAVE	6.00%

G

**Southwest Transmission Cooperative, Inc.**  
**Cost of Service Summary - Present Rates**

<u>LINE NO.</u>		<u>TOTAL SYSTEM</u>
<b>REVENUES:</b>		
1.	NETWORK TRANSMISSION SERVICE (a)	\$ 27,418,546
2.	POINT-TO -POINT (b)	15,442,824
3.	TOTAL FIRM TRANS & SCHED 1 REVENUE	<u>\$ 42,861,370</u>
4.	DAF REVENUE	1,675,701
5.	OTHER SYSTEM CONTROL	119,212
6.	OTHER OPERATING REVENUE (c)	696,543
7.	SPECIAL CONTRACTS & OTHER (c)	1,081,460
8.	TOTAL OPERATING REVENUE	<u>\$ 46,434,286</u>
9.	OPERATING EXPENSES (d)	24,430,165
10.	OPERATING INCOME (MARGINS)	<u>\$ 22,004,122</u>
11.	INCOME TAXES	-
12.	NET INCOME (MARGINS) (LINE 8 - LINE 9)	\$ 22,004,122
13.	RATE BASE (e)	\$ 99,009,871
14.	RATE OF RETURN (f)	22.22%

## SUPPORTING SCHEDULES:

- (a) H-1
- (b) H-2, Page 16
- (c) C-1, Page 3
- (d) C-1, Page 4
- (e) B-1

## RECAP SCHEDULES:

- (f) A-1, Line 3

# Southwest Transmission Cooperative, Inc.

## Cost of Service Summary - Proposed Rates

<u>LINE NO.</u>		<u>TOTAL SYSTEM</u>
<b>REVENUES:</b>		
1.	NETWORK TRANSMISSION SERVICE (a)	\$ 19,493,698
2.	POINT-TO -POINT (b)	10,945,848
3.	TOTAL FIRM TRANS & SCHED 1 REVENUE:	<u>\$ 30,439,546</u>
4.	DAF REVENUE	1,675,701
5.	OTHER SYSTEM CONTROL	84,177
6.	OTHER OPERATING REVENUE (c)	696,543
7.	SPECIAL CONTRACTS & OTHER (f)	781,105
8.	TOTAL OPERATING REVENUE	<u>\$ 33,677,073</u>
9.	OPERATING EXPENSES (d)	24,430,165
10.	OPERATING INCOME (MARGINS)	9,246,908
11.	INCOME TAXES	-
12.	NET INCOME (MARGINS) (LINE 6 - LINE 7)	<u>\$ 9,246,908</u>
13.	RATE BASE (e)	\$ 99,009,871
14.	RATE OF RETURN (g)	9.34%

## SUPPORTING SCHEDULES:

- (a) H-1
- (b) H-2, Page 16
- (c) C-1, Page 3
- (d) C-1, Page 4
- (e) B-1
- (f) F-1, Page 1

## RECAP SCHEDULES:

- (g) A-1, Line 5

**Southwest Transmission Cooperative, Inc.**  
**Derivation Of Revenue Requirement And Rates**

<u>LINE NO.</u>	<u>TOTAL</u>
1. OPERATING EXPENSES (EXCL. REVENUE TAX)	\$ 24,430,165 (a)
2. INTEREST & OTHER DEDUCTIONS:	5,170,450 (a)
3. TOTAL OPERATING EXPENSES (INC. INTEREST)	29,600,615
4. PLUS MARGIN REQUIREMENT	4,384,238
LESS OTHER REVENUES:	
5. OTHER OPERATING REVENUE	696,543 (d)
6. SPECIAL CONTRACTS & OTHER	781,105 (c)
7. DIRECT ASSIGNMENT FACILITIES	1,675,701 (c)
8. SYS. CTL. & LOAD DSPTCH N/I SP.CONT.	1,679,751 (c)
9. TOTAL OTHER INCOME	4,833,099
10. NON-OPERATING MARGINS	307,780
11. PLUS EXTRAORDINARY ITEMS	- (a)
12. NET REVENUE REQUIREMENT BEFORE REV. TAX	28,843,974 (b)
13. REVENUE TAX	-
14. ANNUAL TRANSMISSION REVENUE REQUIREMENT	\$ 28,843,974

SUPPORTING SCHEDULES:

- (a) C-1, Page 4
- (b) G-2A, Page 3
- (c) F-1
- (d) G-1

RECAP SCHEDULES:

- (d) G-2



## Southwest Transmission Cooperative/Arizona Electric Power Cooperative

Proposed Transmission Rates, Control Area Services and Revenue Requirements  
Twelve Months Ended December 31, 2011

Schedule 7&8/Network Transmission Rates		Point-to-Point	Network	Translate Rates to Monthly Rates	
		\$2.558 /kW-mo	\$1,570,730 G-2A, Page 3 for Point-to-Point G-2A, Page 11 for Network	wk 0.03992 Sched 1	
MANDATORY ANCILLARY SERVICES				Day 0.00577	
Schedule 1	System Control & load Dispatch	\$0.173	\$0.173 /kW-mo G-2A, Page 5	on-pk 0.00042	
				off-peak 0.00024	
Schedule 2	Var support / voltage Control	\$0.070	\$0.096 /kW-mo G-2A, Page 6	wk 0.01608 Sched 2	
				Day 0.00232	
				on-pk 0.00017	
				off-peak 0.00010	
TOTAL MANDATORY SVCS		\$2.801		wk 0.06005 Sched 3	
FERC OPTIONAL ANCILLARY SVCS - AEPCCO				Day 0.00867	
Schedule 3	Cost of Reg. & Frequency Response	Gen Cap Rate \$12.323	% Req'd 2.11% = \$/kW-mo = \$0.2602 G-2A, Page 7 =	on-pk 0.00063	
				off-peak 0.00036	
Schedule 5	Operating Reserves- Spinning	\$13.518	= \$0.7232 G-2A, Page 7 =	wk 0.16690 Sched 5	
				Day 0.02411	
Schedule 6	Operating Reserve- Supplemental	\$9.352	= \$0.5009 G-2A, Page 7 =	on-pk 0.00174	
				off-peak 0.00099	
Schedule 4	Energy Imbalance - AEPCCO	Energy in kind deviation +/-1.5%		wk 0.11559 Sched 6	
	AEPCO pays positive imbalance		\$32.63 \$/MWh	Day 0.01670	
	Customer pays negative imbalance		\$100.00 \$/MWh	on-pk 0.00120	
				off-peak 0.00069	
Non-FERC	Replacement Capacity - AEPCCO		\$4.079 G-2A, Page 7	wk 0.59031 Sched 7	
				Day 0.08527	
				on-pk 0.00615	
				off-peak 0.00350	

Losses 0.0297 Loss Study

Notes:

\* Regulation Capacity as a Percentage of Regulated Load  
12 CP Load OS Sales Reg. Load NF W/h Reg 12 CP Reg Cap  
453.58 0.00 453.58 20.00 473.58 10.00  
Reg Pct 2.11%

\*\* Reserve percentages based on 2011 actual SRSG requirements and loads



# Southwest Transmission Cooperative/Arizona Electric Power Cooperative

Derivation of Mohave Network Service 2 Discounted Rate  
Twelve Months Ended December 31, 2011

## MOHAVE DISCOUNTED NETWORK TRANSMISSION RATE BASE & BILLING UNIT SUMMARY

TRANSMISSION PLANT		BU Summary		Total	
		1 CP Load	12 CP Load		
INTANGIBLE	\$ 4,387,916		939.6		0
TRANSMISSION	154,590,042		768.58		0
GENERAL PLANT	17,541,468		\$ 81,842,022	\$ 21,641,897	\$ 103,483,919
A/C 106	-				
A/C 107 @ 50%	4,474,049				
ACQUISITION ADJ & 105	\$ -				
TOTAL	\$ 180,993,475				
	</				

**Southwest Transmission Cooperative/Arizona Electric Power Cooperative**  
Derivation of Transmission Rates, Control Area Services and Revenue Requirements  
Twelve Months Ended December 31, 2011

**SCHEDULE 1: System Control and Load Dispatch**

Account 556 & 557		\$	3,045,791	Ex. Property taxes
Account 561			76,139	
EMS payment from AEPCO			(407,904)	
	<b>TOTAL</b>	\$	<u>2,714,026</u>	
<b>RELIABILITY PORTION</b>	<b>50.00%</b>	\$	<b>1,357,013</b>	

Generation Capacity 655,441 kW

System Control & Load Dispatch \$ 0.173 /kW-mo

<b>Generation Capacity (Avg of Monthly)</b>		<b>Net Rated kW</b>	
Apache Units (@SRSG)		<u>567,000</u>	Page 7
Purchased Pwr			
(Griffith & Southpoint)		60,000	
Fed Hydro (CRSP & PD)	<b>Total</b>	<u>28,441</u>	Actual Avg
		<b>655,441</b>	

Supporting Schedules:  
Schedule C1, Page 3

# Southwest Transmission Cooperative/Arizona Electric Power Cooperative

Derivation of Transmission Rates, Control Area Services and Revenue Requirements  
Twelve Months Ended December 31, 2011

## Schedule 2: COST OF REACTIVE POWER (VAR) PRODUCTION

### AEP CO System Investment in Power Production Facilities

1 Total production plant in service	314,344
2 Turbogenerator Systems	315,345
3 Accessory Electric Equipment	

Orig Cost	Net
\$ 451,867,521	\$ 231,784,262
\$ 65,176,251	\$ 28,264,049
\$ 22,028,539	\$ 8,660,100
\$ 87,204,790	

Schedule G-2A, Page 9

### Separation of Production Plant Allocation to VAR Production

4 Generator and Exciter Systems	#2 * (1-Power Factor)	\$ 4,040,861
5 Accessory Electric Equipment	#3 * (1-Power Factor)	\$ 1,238,119
6 Other Power Production Facilities	1-4.5% (2.5%)	\$ 566,263

### 7 Total Facilities Allocated to VAR Production

\$ 5,845,244

### Annualized Facilities Costs Allocated to VAR Production

Ln 7 x ROR	8.94%	\$ 522,308
DSCR	1.350	

### Rates For VAR Production

	I2 CP	I CP
\$/kW/year	453.58	624.6
\$/kW/month	1.152	0.836
	0.096	0.070

### Power Factor

Gross Nameplate Output in kW	Pwr Factor Generator Name plate	Weighted Power factor	Equivalent Availability Factor	Weighted Average
Steam Unit 1	77,400	0.85	10.89%	96.18%
Steam Unit 2	195,000	0.85	27.42%	96.65%
Steam Unit 3	195,000	0.85	27.42%	83.00%
Gas Turbine 1	10,000	0.85	1.41%	98.58%
Gas Turbine 2	20,000	0.90	2.98%	98.31%
Gas Turbine 3	65,000	0.90	9.68%	98.68%
Gas Turbine 4	42,000	0.85	5.91%	96.55%
	604,400		85.70%	92.48%

(1-Power factor)

14.30%

### Turbogenerator Systems

Account 314	Acquisition Value	Accum Dep.
ST1	\$ 6,433,059	\$ (6,300,309)
ST2	26,487,003	(13,627,403)
ST3	27,366,358	(13,452,232)
	\$ 60,286,419	\$ (33,379,944)

### Accessory Electric Equipment

Account 315	Acquisition Value	Accum Dep.
ST1	\$ 455,009	\$ (448,613)
ST2	9,420,407	(6,136,643)
ST3	8,712,432	(5,359,125)
	\$ 18,587,848	\$ (11,944,382)

Account 344	Acquisition Value	Accum Dep.
ICI/GTI	\$ 1,552,238	\$ (1,552,238)
GT2	\$ 653,053	(716,750)
GT3	1,726,697	(1,009,405)
GT4	957,843	(253,865)
	\$ 4,889,832	\$ (3,532,258)

Account 345	Acquisition Value	Accum Dep.
ICI/GTI	\$ 477,568	\$ (105,395)
GT2	224,083	(248,891)
GT3	1,127,427	(631,705)
GT4	1,611,613	(438,066)
	\$ 3,440,691	\$ (1,424,058)

Acct 314 & 344	\$ 65,176,251
Accum Dep.	(36,912,202)
Net Plant	\$ 28,264,049

Acct 315 & 345	\$ 22,028,539
Accum Dep.	(13,368,439)
Net Plant	\$ 8,660,100

# Southwest Transmission Cooperative/Arizona Electric Power Cooperative

Derivation of Transmission Rates, Control Area Services and Revenue Requirements  
Twelve Months Ended December 31, 2011

## Schedules 3, 5 & 6: APACHE STATION COST SUPPORT BY UNIT

Gen. Units	SRSR RATING	Prod Invest.	Int. pft. a/c 106,107 Transm. CP	Accum Dep & Amort + Retirement WIP	Working Capital	Net. Prod. Invest less TURBO	Prod \$/kW	O&M Exp	A&G	Taxes	Depreciation	Annual Carrying Costs	Annual Revenue Rpt	Annual RevRpt/kW
ST1	68,000	\$ 26,875,917	\$ 35,468,914	\$ 21,325,848	\$ 34,751,049	\$ 9,943,181	\$ 146.22	\$ 24,540,349	\$ 9,684,069	\$ 2,269,687	\$ 13,349,504	\$ 23,284,844	\$ 73,128,453	\$ 69.41
ST2	182,000	\$ 174,250,425	\$ 2,289,296	\$ 14,842,685	\$ 2,242,962	\$ 93,093,391	\$ 511.50	\$ 1,583,926	\$ 625,046	\$ 146,494	\$ 861,627	\$ 1,502,891	\$ 4,719,983	\$ 168.14
ST3	190,000	\$ 169,366,655	\$ 14,426,684	\$ 84,170,949	\$ 14,134,699	\$ 96,489,657	\$ 507.84	\$ 10,269,406	\$ 4,052,495	\$ 949,796	\$ 5,586,370	\$ 9,744,014	\$ 30,602,081	\$ 156.55
IC1/GT1	9,000	\$ 2,440,260	\$ 207,862	\$ 1,950,406	\$ 203,655	\$ 529,198	\$ 58.80	\$ 143,816	\$ 56,752	\$ 13,301	\$ 78,233	\$ 136,458	\$ 29,744,387	\$ 47.62
GT2	17,000	\$ 3,221,285	\$ 274,390	\$ 2,825,223	\$ 268,836	\$ 1,027,793	\$ 60.46	\$ 189,846	\$ 74,917	\$ 17,558	\$ 103,273	\$ 180,133	\$ 438,562	\$ 33.28
GT3	63,000	\$ 9,706,516	\$ 826,803	\$ 7,149,595	\$ 810,069	\$ 2,980,869	\$ 47.32	\$ 572,051	\$ 225,742	\$ 52,908	\$ 311,185	\$ 542,785	\$ 1,704,671	\$ 27.06
GT4	38,000	\$ 30,537,549	\$ 2,601,194	\$ 8,157,790	\$ 2,548,548	\$ 25,651,976	\$ 675.05	\$ 1,799,723	\$ 710,203	\$ 410,000	\$ 979,017	\$ 1,707,648	\$ 5,606,590	\$ 147.54
567,000	\$ 416,398,607	\$ 35,468,914	\$ 219,978,356	\$ 34,751,049	\$ 229,716,065	\$ 229,716,065		\$ 24,540,349	\$ 9,684,069	\$ 2,513,234	\$ 13,349,504	\$ 23,284,844	\$ 73,372,001	

Gen. Units	SRSR RATING	Turbo Equip	Plant Dep Reserve	Turbo Depreciation	Net Turbo Plant
ST1	68,000	\$ 6,888,068	\$ (20,330,787)	\$ (6,748,922)	\$ 139,145
ST2	182,000	\$ 35,907,410	\$ (87,947,141)	\$ (19,764,046)	\$ 16,143,364
ST3	190,000	\$ 36,078,789	\$ (77,900,273)	\$ (18,811,357)	\$ 17,267,432
IC1/GT1	9,000	\$ 2,029,807	\$ (1,860,057)	\$ (1,657,634)	\$ 372,173
GT2	17,000	\$ 877,136	\$ (2,705,957)	\$ (965,641)	\$ (88,505)
GT3	63,000	\$ 2,854,125	\$ (6,796,129)	\$ (1,641,110)	\$ 1,213,014
GT4	38,000	\$ 2,569,456	\$ (7,027,160)	\$ (691,931)	\$ 1,877,525
TOTAL	567,000	\$ 87,204,790	\$ (204,561,503)	\$ (50,280,641)	\$ 36,924,149

Regulation	Cost/kW	Annual \$
ST2	\$ 168.143	\$ 30,602,081
ST3	\$ 156.549	\$ 29,744,387
ST1	\$ 69.412	\$ 4,719,983
440,000	\$	\$ 65,066,452

Int. pft. a/c 106,107, Transm. CP	\$/kW/year	\$/kW/month
Intangible Plant	\$ 11,177,788	
Transmission	\$ 6,107,366	
General Plant	\$ 16,071,390	
Acc 106	\$ 30,238	
Acc 107 @ 50%	\$ 2,082,132	
	\$ 35,468,914	

## Depreciation & Amortization

Accumulated Depreciation Transmission Plant	\$
Accumulated Depreciation General and Int. Plant	\$ 1,941,510
Accumulated Amortization	\$ 7,318,651
Retirement Work in Progress	\$ 6,261,595
	\$ (104,903)
	\$ 15,416,853

Replacement	Cost/kW	Annual \$
GT1	\$ 9.000	\$ 47,618
ST1	\$ 68.000	\$ 69,412
GT3	\$ 63.000	\$ 27,058
	\$ 140,000	\$ 6,853,215

\$/kW/year	\$/kW/month
\$ 48.952	\$ 4.079

## Schedule 6 Supplemental

Supplemental	kW Capacity	Cost/kW	Annual \$
GT4	38,000	\$ 147,542	\$ 5,606,590
GT2	17,000	\$ 33,278	\$ 565,726
	55,000	\$	\$ 6,172,317

## Schedule 5 Spinning

Spinning	kW Capacity	Cost/kW	Annual \$
ST2	182,000	\$ 168.143	\$ 30,602,081
ST3	190,000	\$ 156.549	\$ 29,744,387
	372,000	\$	\$ 60,346,469

## Account 310: Land account

SRSG RATING	\$
ST1	\$ 68,000
ST2	\$ 182,000
ST3	\$ 190,000
IC1/GT1	\$ 9,000
GT2	\$ 17,000
GT3	\$ 63,000
GT4	\$ 38,000
	\$ 567,000

# Southwest Transmission Cooperative/Arizona Electric Power Cooperative

Derivation of Transmission Rates, Control Area Services and Revenue Requirements

Twelve Months Ended December 31, 2011

## DEBT SERVICE CALCULATIONS

INTEREST ON LONG TERM DEBT	\$	5,008,818 (a)
PRINCIPAL PAYMENTS		4,936,841 (b)
TOTAL DEBT SERVICE	\$	9,945,659

DSCR & DSC 1.35 \$ 13,426,640

### LESS:

DEPRECIATION & AMORTIZATION	\$	4,033,584 (c)
NON-OPERATING MARGINS	\$	307,780 (c)

### PLUS:

OTHER INTEREST EXPENSE	\$	7,631 (c)
OTHER DEDUCTIONS	\$	174,178 (c)
INTEREST CHARGED TO CONSTRUCTION	\$	(20,177) (c)

MARGIN & 8.94% \$ 9,246,908  
% RETURN ON RATE BASE

NET UTILITY PLANT \$ 100,598,843 (d)

WORKING CAPITAL \$ 2,885,077 (d)

RETIREMENT WIP \$ - (d)

TOTAL RATE BASE \$ 103,483,919

### Supporting Schedules:

- (a) Schedule C-1, Page 4
- (b) Schedule E-1, Page 2
- (c) Schedule F-1, Page 2
- (d) Schedule G-2A, Page 3

# Southwest Transmission Cooperative/Arizona Electric Power Cooperative

Derivation of Transmission Rates, Control Area Services and Revenue Requirements  
Twelve Months Ended December 31, 2011

## APCCO PRODUCTION PLANT ORIGINAL COST AND NET PLANT SUMMARY FOR ANCILLARY SERVICES WORKSHEETS

INTANGIBLE	\$	11,177,788	PRODUCTION CAPABILITY (kW on SRSG Basis)	567,000
PRODUCTION			NET INVESTMENT	\$ 260,585,164
STEAM 1	\$	26,875,917	DSCR & % RETURN	1.35
STEAM 2		174,250,425	ON RATE BASE	8.94%
STEAM 3		169,366,655		
GT 1		2,440,260		
GT 2		3,221,285		
GT 3		9,706,516		
GT 4		30,537,549		
Transmission Plant		6,107,566		
GENERAL PLANT		16,071,390	ANNUAL CARRYING COSTS	\$ 23,284,844
A/C 106		30,238	ANNUAL EXPENSES	\$ 65,735,933
A/C 107@50%		2,082,132		
ACQUISITION ADJ	\$			
TOTAL		\$ 451,867,521	PLANT ANNUAL REVENUE REQUIREMENTS	\$ 89,020,777
			PLANT ANNUAL COSTS/KW	\$ 157.00
			MONTH	\$ 13.08

## DEPRECIATION & AMORTIZATION RESERVE

PRODUCTION	\$	(20,330,787)		
STEAM 1		(87,947,141)		
STEAM 2		(77,900,273)		
STEAM 3		(1,860,057)		
GT 1		(2,705,957)		
GT 2		(6,790,129)		
GT 3		(7,027,160)		
GT 4		(7,318,651)		
GENERAL & INTANGIBLE PLANT		(1,941,510)		
TRANSMISSION PLANT		(6,261,595)		
AMORTIZATION	\$			
TOTAL		\$ (220,083,259)		

NET PRODUCTION PLANT \$ 225,939,018 less turbo eqp. \$ 5,845,244

WORKING CAPITAL \$ 34,751,049

RETIREMENT WIP \$ (104,903)

PRODUCTION PLANT RATE BASE \$ 260,585,164

## EXPENSE ALLOCATION

PRODUCTION OP	\$	9,794,640		
PRODUCTION MNT		14,745,709		
OTHER		3,509,469	Acct. 556	
* TRANSMISSION EXP		12,382,855		
A&G		9,684,069		
TAXES		2,269,687		
DEP EXP	\$	13,349,504		
TOTAL		\$ 65,735,933		



**Southwest Transmission Cooperative/Arizona Electric Power Cooperative**  
Derivation of Transmission Rates, Control Area Services and Revenue Requirements  
Twelve Months Ended December 31, 2011

**SCHEDULE 4: ENERGY IMBALANCE**

Energy Imbalance Cost = Accts 501+547+ e-charge A/C 555/kwh

Fuel	501/547	\$	65,283,413
Purchased Power	555 Energy Only		13,533,831
Non-Firm Wheeling			553
Firm Contracts Energy Revenues			0
Economy Sales Energy Revenues			(2,855,354)
		\$	<u>75,962,444</u>

Total sales	2,327,819,816 kWh
	\$ 32.63 \$/MWh

**BILLING UNIT AND TRANSMISSION REVENUE SUMMARY WORKSHEET - PROPOSED  
POINT-TO-POINT TRANSMISSION SERVICES**

	JAN	FEB	MAR	APR	MAY	JUN	2011 JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Loads in kW and rates in \$ per kW-mo. unless otherwise indicated													
AEPCO													
Loads (kW)	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	3,780,000
Rate	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	2,558
Total Dollars	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 805,770	\$ 9,669,240
Sulphur Springs													
Firm Point to Point													
Loads (kW)													-
Rate	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	2,558
Total Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Mohave													
Firm Point to Point													
Loads (kW)	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	108,000
Rate	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	2,558
Total Dollars	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 23,022	\$ 276,264
FMI Safford Mine													
Wheeling													
Loads (kW)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	120,000
Rate	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	\$ 2,558	2,558
Total Dollars	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 25,580	\$ 306,960
TOTAL Point to Point													
Loads (kW)	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	4,008,000
REVENUE	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 10,252,464
Network Loads													
2011 Network													
Average													Average
Loads (kW)	330,776	396,480	293,962	351,210	438,264	605,585	604,821	601,253	559,608	412,834	281,890	338,283	434,580
1 CP Load													12 CP Load
Total Point to Point and Network Loads													
664,776	730,480	627,962	685,210	772,264	939,585	938,821	935,253	893,608	746,834	615,890	672,283	768,580	939,585

5,214,966  
1 CP Load  
239,585

**BILLING UNIT AND TRANSMISSION REVENUE SUMMARY WORKSHEET  
Revenue Credits**

The Following Service as Additional Bill Credits to Network Customers

	2011												TOTAL
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Special Contract Revenue Credits													
AEPCO Firm													
Firm Pt to Pt - Serv - kWh													
Rate	\$ -	\$ 5,000	\$ 40,000	\$ -	\$ 16,000	\$ 6,000	\$ -	\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ 77,000
Point to Point	\$ -	\$ 0.0018	\$ 0.0031	\$ -	\$ 0.0018	\$ 0.0035	\$ -	\$ -	\$ -	\$ -	\$ 0.0035	\$ -	\$ -
Energy-Based	\$ -	\$ 9	\$ 123	\$ -	\$ 28	\$ 21	\$ -	\$ -	\$ -	\$ -	\$ 35	\$ -	\$ 216
AEPCO (kWh)													
3rd party sales													
Non-Firm	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000
Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.0035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 88
Total Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 88	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 88
AEPCO													
Service to ED4 and													
ED5													
Loads in kWh	8,918,000	1,052,000	535,000	175,000	255,000	21,000	150,000	470,000	19,000	1,535,000	54,000	64,000	13,248,000
Rate	\$ 0.0020	\$ 0.0020	\$ 0.0024	\$ 0.0018	\$ 0.0019	\$ 0.0018	\$ 0.0018	\$ 0.0018	\$ 0.0018	\$ 0.0018	\$ 0.0027	\$ 0.0019	\$ 0.0019
Total Dollars	\$ 18,161	\$ 2,097	\$ 1,286	\$ 308	\$ 484	\$ 37	\$ 263	\$ 823	\$ 33	\$ 2,759	\$ 146	\$ 123	\$ 26,520
Mohave													
3rd party sales													
Umbrella													
Loads in kWh	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Dollars	\$ 26,354	\$ 13,811	\$ 3,549	\$ 971	\$ 13,879	\$ 9,542	\$ 8,728	\$ 7,347	\$ 8,215	\$ 12,982	\$ 5,535	\$ 15,480	\$ 126,394
Avra & Silverbell													
Loads (kW)	1,417	1,417	1,417	1,435	1,649	2,017	2,050	2,143	2,143	2,143	2,143	2,143	22,117
Rate	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44	\$ 0.44
Total Dollars	\$ 623	\$ 623	\$ 623	\$ 631	\$ 726	\$ 887	\$ 902	\$ 943	\$ 943	\$ 943	\$ 943	\$ 943	\$ 9,731
Sulphur Springs													
3rd party sales													
Umbrella													
Loads in kWh	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Dollars	\$ 1,704	\$ 1,117	\$ 111	\$ 35	\$ 188	\$ 2,143	\$ 2,652	\$ 2,398	\$ 1,028	\$ 2,093	\$ 1,778	\$ 2,706	\$ 17,952
Sulphur Springs													
Firm Point to Point													
Energy Based													
Loads in kWh	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FMI - Safford Mine													
Non-Firm kWh													
Rate	\$ 0.0021	\$ 0.0022	\$ 0.0027	\$ 0.0028	\$ 0.0028	\$ 0.0029	\$ 0.0028	\$ 0.0028	\$ 0.0029	\$ 0.0029	\$ 0.0029	\$ 0.0028	\$ 0.0028
Total Dollars	\$ 163	\$ 210	\$ 1,100	\$ 3,754	\$ 9,910	\$ 12,730	\$ 10,616	\$ 10,428	\$ 11,548	\$ 20,112	\$ 21,423	\$ 11,327	\$ 113,321
Contract Minimum													
Minimum Charge													
Rate	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 30,696	\$ 376,026
Total Dollars	\$ 30,859	\$ 30,906	\$ 31,796	\$ 34,450	\$ 40,606	\$ 43,426	\$ 41,312	\$ 41,124	\$ 42,244	\$ 50,808	\$ 56,723	\$ 45,093	\$ 489,347
TEP Point to Point													
Energy Based													
Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Misc													
(APS, PNM, etc.)													
Loads in kWh	27,000	-	-	-	1,000	-	-	-	102,000	1,930,000	1,930,000	-	3,990,000
Rate	\$ 0.0094	\$ -	\$ -	\$ -	\$ 0.0035	\$ -	\$ -	\$ -	\$ 0.0046	\$ 0.0031	\$ 0.0044	\$ -	\$ 3,990,000
Total Dollars	\$ 254	\$ -	\$ -	\$ -	\$ 4	\$ -	\$ -	\$ 619	\$ 468	\$ 6,054	\$ 8,487	\$ -	\$ 15,887
Total Special Contract & Other Credits	\$ 77,956	\$ 48,564	\$ 37,488	\$ 36,431	\$ 56,553	\$ 100,666	\$ 62,568	\$ 53,615	\$ 52,932	\$ 76,690	\$ 73,648	\$ 64,344	\$ 741,454

BILLING UNIT AND TRANSMISSION REVENUE SUMMARY WORKSHEET  
NETWORK INTEGRATED TRANSMISSION SERVICES

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
COS Trans Revenue Requirements	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 2,403,664	\$ 28,843,974
Avg Mo Rev from Pt to Pt Service	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 854,372	\$ 10,252,464
Network Services Revenue Requirements	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 1,549,292	\$ 18,591,510
Discount Revenue Shortfall	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 21,437	\$ 257,248
Network Services	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
MEC System Discount	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 15,017,214
NETWORKS													
Anza													
Loads: 2010	7,236	7,764	6,224	4,980	5,928	7,320	10,296	9,612	9,480	5,624	8,880	8,784	92,628
Loads: 2011	6,744	7,368	5,988	5,424	5,760	8,436	10,524	9,396	8,400	7,404	7,164	7,404	89,412
12 Month Rolling Avg	7,078	7,645	7,617	7,654	7,640	7,683	7,702	7,684	7,594	7,709	7,566	7,451	91,623
Trans Cost	\$ 29,827	\$ 29,120	\$ 29,020	\$ 28,891	\$ 28,624	\$ 28,262	\$ 28,073	\$ 27,618	\$ 26,986	\$ 27,631	\$ 27,355	\$ 26,931	\$ 338,339
Duncan													
Loads: 2010	3,800	3,620	3,640	3,260	5,274	5,568	6,622	6,696	5,338	4,668	4,120	4,462	57,068
Loads: 2011	4,304	5,306	3,854	3,808	7,406	6,954	6,954	6,084	6,084	4,422	3,588	4,132	61,986
12 Month Rolling Avg	4,798	4,938	4,956	5,002	5,011	5,164	5,191	5,196	5,258	5,237	5,193	5,166	61,110
Trans Cost	\$ 18,639	\$ 18,809	\$ 18,882	\$ 18,881	\$ 18,774	\$ 18,996	\$ 18,921	\$ 18,676	\$ 18,685	\$ 18,771	\$ 18,776	\$ 18,672	\$ 225,480
Graham													
Loads: 2010	19,401	19,361	18,756	19,187	28,764	35,530	39,841	40,290	32,315	28,648	21,817	21,288	325,198
Loads: 2011	22,019	24,442	24,082	24,262	30,252	44,283	40,089	40,545	39,290	25,523	20,126	23,313	358,226
12 Month Rolling Avg	27,318	27,741	28,185	28,608	28,732	29,462	29,482	29,504	30,085	29,824	29,852	29,852	348,476
Trans Cost	\$ 106,124	\$ 105,665	\$ 107,381	\$ 107,986	\$ 107,648	\$ 108,377	\$ 107,459	\$ 106,045	\$ 106,912	\$ 106,897	\$ 107,320	\$ 107,896	\$ 1,285,709
Mohave 1													
Loads: 2010	73,495	69,480	64,736	74,784	86,600	103,424	117,720	112,728	102,036	88,640	70,031	68,112	1,031,786
Loads: 2011	76,064	84,062	83,391	84,881	84,577	84,971	84,971	86,200	87,182	86,770	87,584	87,584	1,020,698
12 Month Rolling Avg	86,196	83,391	84,062	83,391	84,577	84,971	84,971	86,200	87,182	86,770	87,584	87,584	1,020,698
Trans Cost	\$ 334,850	\$ 320,189	\$ 317,708	\$ 309,074	\$ 311,718	\$ 311,513	\$ 308,275	\$ 305,408	\$ 306,325	\$ 312,483	\$ 313,721	\$ 316,561	\$ 3,767,826
Mohave 2													
Loads: 2010	-	-	-	9,758	24,321	56,751	59,061	46,779	49,403	35,068	5,278	13,011	299,430
Loads: 2011	-	-	-	17,199	29,773	16,494	29,773	16,494	41,937	16,494	-	-	310,769
12 Month Rolling Avg	24,953	28,386	29,819	31,487	30,835	29,579	29,082	28,957	27,422	26,982	25,897	25,897	342,702
Trans Cost	\$ 77,231	\$ 86,143	\$ 90,513	\$ 94,693	\$ 92,043	\$ 85,880	\$ 84,453	\$ 84,703	\$ 81,985	\$ 78,408	\$ 77,724	\$ 74,574	\$ 1,008,250
Sulphur Springs 1													
Loads: 2010	99,000	97,000	88,000	69,000	85,000	107,000	96,000	90,000	92,000	84,000	88,000	94,000	1,089,000
Loads: 2011	104,000	57,000	54,000	56,000	116,000	116,000	116,000	116,000	115,000	112,000	97,000	112,000	1,171,000
12 Month Rolling Avg	91,167	87,853	85,000	83,917	86,500	87,250	88,917	91,083	93,000	95,333	96,083	97,583	1,083,666
Trans Cost	\$ 354,161	\$ 334,553	\$ 323,858	\$ 316,760	\$ 324,082	\$ 320,952	\$ 324,094	\$ 327,376	\$ 330,490	\$ 341,698	\$ 347,392	\$ 352,701	\$ 3,998,098
Sulphur Springs 2													
Loads: 2010	12,285	12,346	23,701	39,321	35,309	38,052	41,652	36,395	41,942	60,188	31,072	20,960	383,223
Loads: 2011	15,329	92,987	46,345	68,752	72,121	72,185	67,441	67,006	52,691	14,003	2,315	9,826	536,201
12 Month Rolling Avg	32,189	38,909	40,796	43,249	42,566	46,244	48,410	48,008	51,856	48,008	45,611	44,683	533,482
Trans Cost	\$ 125,046	\$ 148,203	\$ 155,427	\$ 163,251	\$ 159,478	\$ 170,110	\$ 176,450	\$ 183,167	\$ 184,278	\$ 172,073	\$ 164,909	\$ 161,501	\$ 1,963,894
Trico 1													
Loads: 2010	79,885	78,861	80,136	72,709	112,714	146,684	161,072	161,386	147,885	130,908	86,140	94,017	1,352,397
Loads: 2011	90,711	109,682	50,438	68,834	87,016	101,207	114,544	135,153	125,489	114,421	73,358	90,804	1,161,657
12 Month Rolling Avg	113,602	116,170	113,696	113,373	111,231	107,441	103,564	101,378	99,512	98,138	97,073	96,805	1,271,983
Trans Cost	\$ 441,316	\$ 442,488	\$ 433,166	\$ 427,946	\$ 416,739	\$ 395,225	\$ 377,481	\$ 364,379	\$ 353,631	\$ 351,752	\$ 350,972	\$ 349,889	\$ 4,704,985
Trico 2													
Loads: 2010	-	-	-	23,000	29,000	69,000	54,000	29,000	28,000	2,000	2,000	-	259,000
Loads: 2011	-	-	-	1,917	3,833	6,250	12,000	18,917	21,250	21,417	21,583	21,583	145,250
12 Month Rolling Avg	-	-	-	7,304	14,468	23,416	44,142	60,141	67,993	75,515	76,764	78,034	\$ 525,787
Trans Cost	\$ -	\$ -	\$ -	\$ 15,693	\$ 16,108	\$ 16,193	\$ 16,242	\$ 16,158	\$ 16,354	\$ 16,627	\$ 16,754	\$ 16,901	\$ 196,094
Safford													
Loads: 2010	8,859	8,588	7,479	8,596	13,069	16,335	19,163	18,447	14,424	15,092	8,931	9,218	148,501
Loads: 2011	8,812	11,008	8,704	10,748	14,402	20,583	16,587	19,744	18,832	12,286	8,201	9,684	159,591
12 Month Rolling Avg	12,371	12,573	12,675	12,629	12,940	13,080	13,188	13,555	13,321	13,260	13,299	13,299	156,385
Trans Cost	\$ 48,058	\$ 47,890	\$ 48,290	\$ 48,425	\$ 48,481	\$ 48,902	\$ 47,675	\$ 47,401	\$ 47,446	\$ 47,446	\$ 47,942	\$ 48,068	\$ 577,049
Thatcher													
Loads: 2010	2,995	2,898	2,365	3,208	3,869	5,218	6,122	6,055	4,861	5,480	3,104	2,743	48,918
Loads: 2011	2,793	3,619	3,664	4,407	4,407	6,887	5,635	7,108	7,458	4,299	3,051	3,247	56,117
12 Month Rolling Avg	4,060	4,120	4,228	4,290	4,335	4,434	4,433	4,433	4,433	4,433	4,433	4,433	\$ 53,176
Trans Cost	\$ 15,772	\$ 15,693	\$ 16,108	\$ 16,193	\$ 16,242	\$ 16,158	\$ 16,354	\$ 16,627	\$ 16,754	\$ 16,754	\$ 16,754	\$ 16,901	\$ 196,094
Total Network Loads: 2010	306,956	299,918	295,137	305,103	400,848	512,482	557,549	528,388	498,684	458,116	327,373	336,595	4,828,148
Total Network Loads: 2011	330,776	396,480	293,962	351,310	438,264	605,585	604,821	604,821	599,608	604,821	281,890	338,283	5,214,966
TOTAL Network loads 12 mo. rolling Avg	404,332	412,377	412,280	416,123	419,240	426,999	430,938	437,011	442,004	438,230	434,438	434,579	5,108,551
TOTAL NETWORK DOLLARS	\$ 1,551,025	\$ 1,548,751	\$ 1,547,636	\$ 1,546,570	\$ 1,547,246	\$ 1,548,818	\$ 1,549,182	\$ 1,549,118	\$ 1,549,812	\$ 1,550,750	\$ 1,550,899	\$ 1,551,703	\$ 18,591,510

**BILLING UNIT AND TRANSMISSION REVENUE SUMMARY WORKSHEET - PRESENT ADJUSTED**  
**POINT-TO-POINT TRANSMISSION SERVICES**

Lands in kW and rates in \$ per kW-m, unless otherwise indicated

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>AEPCO</b>													
Firm P-P													
Lands (kW)	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	3,780,000
Rate	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608
Total Dollars	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 13,638,240
<b>Sulphur Springs</b>													
Firm P-P													
Lands (kW)	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608	3,608
Rate	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Mohave</b>													
Firm Point to Point													
Lands (kW)	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	108,000
Rate	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608
Total Dollars	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 389,664
<b>FMI Safford Mine</b>													
Firm P-P Reserved after 10,000 kW													
Lands (kW)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	120,000
Rate	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608	3.608
Total Dollars	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 432,960
<b>TOTAL Point to Point</b>													
LOADS kW	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	4,008,000
REVENUE	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 1,205,072	\$ 14,460,864
<b>Network Loads</b>													
2011 Network													
Total Point to Point and Network Loads	330,776	396,480	293,962	351,210	438,264	605,585	604,821	601,253	559,688	412,834	281,890	338,283	5,214,966
	664,776	730,480	627,962	685,210	772,264	939,585	938,821	935,253	893,688	746,834	615,890	672,283	10,685,585

1 CP Load  
235,585

**BILLING UNIT AND TRANSMISSION REVENUE SUMMARY WORKSHEET**  
**Revenue Credits**

The Following Serve as Additional Bill Credits to Network Customers

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Special Contract Revenue Credits</b>													
<b>AEPCO Firm</b>													
Point to Point													
Energy-Based													
Lands (kW)	5,000	5,000	40,000	16,000	16,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	77,000
Rate p/p	0.0025	0.0025	0.0043	0.0025	0.0025	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049
Total Dollars P/P	\$ 12	\$ 12	\$ 173	\$ 40	\$ 40	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 304
<b>AEPCO (kW)</b>													
3rd party sales													
Non-Firm													
Lands (kW)	1,052,000	1,052,000	535,000	175,000	255,000	21,000	150,000	470,000	19,000	1,535,000	54,000	64,000	13,248,000
Rate p/p	0.0029	0.0028	0.0034	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0038	0.0027	0.0027
Total Dollars P/P	\$ 2,958	\$ 2,958	\$ 1,814	\$ 434	\$ 682	\$ 52	\$ 371	\$ 1,161	\$ 47	\$ 3,892	\$ 206	\$ 173	\$ 37,406
<b>Mohave</b>													
3rd party sales													
Umbrella													
Lands (kW)	1,417	1,417	1,417	1,435	1,649	2,017	2,050	2,143	2,143	2,143	2,143	2,143	22,117
Rate p/p	0.4400	0.4400	0.4400	0.4400	0.4400	0.4400	0.4400	0.4400	0.4400	0.4400	0.4400	0.4400	0.4400
Total Dollars P/P	\$ 623	\$ 623	\$ 623	\$ 631	\$ 726	\$ 887	\$ 902	\$ 943	\$ 943	\$ 943	\$ 943	\$ 943	\$ 9,731
<b>Sulphur Springs</b>													
3rd party sales													
Umbrella													
Lands (kW)	2,403	2,403	2,403	2,403	2,403	2,403	2,403	2,403	2,403	2,403	2,403	2,403	28,836
Rate p/p	1.575	1.575	1.575	1.575	1.575	1.575	1.575	1.575	1.575	1.575	1.575	1.575	1.575
Total Dollars P/P	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 3,786	\$ 45,331
<b>Sulphur Springs</b>													
Firm Point to Point													
Energy Based													
Lands (kW)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
Rate p/p	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049
Total Dollars P/P	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 58,800
<b>FMI - Safford Mine</b>													
Non-Firm kW													
Lands (kW)	230	230	230	230	230	230	230	230	230	230	230	230	2,760
Rate p/p	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049
Total Dollars P/P	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 1,127	\$ 13,524
<b>Contract Minimum</b>													
Lands (kW)	43,296	43,296	43,296	43,296	43,296	43,296	43,296	43,296	43,296	43,296	43,296	43,296	519,552
Rate p/p	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049
Total Dollars P/P	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 212,138	\$ 2,544,672
<b>TEP Point to Point</b>													
Energy Based													
Lands (kW)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000
Rate p/p	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049	0.0049
Total Dollars P/P	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 4,900	\$ 58,800
<b>Other Mine</b>													
(APS, PNM, etc.)													
Lands (kW)	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	324,000
Rate p/p	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133	0.0133
Total Dollars	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 3,591	\$ 43,092
<b>Total Special Contract Credits</b>													
	\$ 109,699	\$ 68,242	\$ 52,621	\$ 51,125	\$ 79,469	\$ 141,623	\$ 87,880	\$ 75,235	\$ 74,272	\$ 107,783	\$ 103,492	\$ 99,569	\$ 1,041,809

BILLING UNIT AND TRANSMISSION REVENUE SUMMARY WORKSHEET  
NETWORK INTEGRATED TRANSMISSION SERVICES

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Network Revenue Req't	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,111
Mohave Network Revenue Req't	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 24,678,748
Loads: 2010	7,236	7,764	6,224	4,980	5,928	7,920	10,296	9,612	9,480	5,424	8,880	8,784	92,628
Loads: 2011	6,744	7,368	5,988	5,424	5,760	8,436	10,524	9,396	8,400	6,804	7,164	7,404	89,412
12 Month Rolling Avg	7,678	7,648	7,648	7,648	7,648	7,648	7,648	7,648	7,648	7,648	7,648	7,648	91,623
Trans Cost	\$ 41,533	\$ 40,548	\$ 40,409	\$ 40,230	\$ 39,858	\$ 39,354	\$ 39,091	\$ 38,457	\$ 37,578	\$ 38,475	\$ 38,091	\$ 37,500	\$ 471,123
Loads: 2010	3,800	3,620	3,640	3,260	5,274	5,568	6,622	6,696	5,338	4,668	4,120	4,462	57,068
Loads: 2011	4,304	5,306	3,854	3,808	5,380	7,406	6,954	6,748	6,084	4,422	5,388	4,132	61,986
12 Month Rolling Avg	4,798	4,938	4,958	5,002	5,011	5,161	5,191	5,196	5,238	5,237	5,193	5,166	61,110
Trans Cost	\$ 25,954	\$ 26,190	\$ 26,292	\$ 26,291	\$ 26,291	\$ 26,451	\$ 26,346	\$ 26,005	\$ 26,018	\$ 26,138	\$ 26,144	\$ 26,000	\$ 313,972
Loads: 2010	19,401	19,361	18,756	19,187	28,764	35,530	39,841	40,290	32,315	28,648	21,817	21,288	325,198
Loads: 2011	22,019	24,442	24,082	24,262	30,252	44,283	40,089	40,545	39,290	25,523	20,126	22,312	386,226
12 Month Rolling Avg	27,318	27,741	28,185	28,068	28,732	29,462	29,482	29,504	30,085	29,824	29,682	29,852	348,276
Trans Cost	\$ 17,713	\$ 17,133	\$ 16,924	\$ 16,936	\$ 16,935	\$ 15,910	\$ 14,932	\$ 14,763	\$ 14,870	\$ 14,850	\$ 14,939	\$ 15,041	\$ 1,790,296
Loads: 2010	73,495	69,480	64,736	74,784	86,600	103,424	117,720	112,728	102,836	88,640	70,031	68,112	1,031,786
Loads: 2011	76,064	43,864	56,688	56,660	102,432	121,232	116,434	117,463	116,777	100,433	65,087	77,873	1,051,007
12 Month Rolling Avg	86,196	84,062	83,391	83,300	84,684	84,577	84,971	86,200	86,200	87,182	86,796	87,584	1,020,698
Trans Cost	\$ 466,265	\$ 445,859	\$ 442,395	\$ 430,373	\$ 434,055	\$ 433,769	\$ 429,261	\$ 425,267	\$ 426,545	\$ 435,119	\$ 436,643	\$ 440,798	\$ 5,246,541
Loads: 2010	-	-	-	9,758	24,321	56,751	59,061	46,779	49,403	35,068	5,278	13,011	299,430
Loads: 2011	-	41,204	27,773	16,494	38,366	58,413	52,740	41,937	16,643	27,442	26,982	25,897	310,769
12 Month Rolling Avg	24,653	28,386	29,419	31,487	30,835	29,363	29,082	29,579	28,957	27,422	26,982	25,897	342,702
Trans Cost	\$ 126,919	\$ 141,564	\$ 148,745	\$ 151,615	\$ 151,260	\$ 141,133	\$ 138,788	\$ 139,196	\$ 134,732	\$ 128,688	\$ 127,729	\$ 122,553	\$ 1,656,922
Loads: 2010	99,000	97,000	88,000	69,000	85,000	107,000	96,000	90,000	92,000	84,000	88,000	94,000	1,009,000
Loads: 2011	184,000	57,000	54,000	56,000	116,000	116,000	116,000	116,000	115,000	112,000	97,000	112,000	1,171,000
12 Month Rolling Avg	91,167	87,833	85,000	89,917	86,506	87,250	88,917	91,083	93,003	95,333	96,083	97,583	1,083,666
Trans Cost	\$ 493,155	\$ 465,851	\$ 450,931	\$ 441,075	\$ 451,271	\$ 446,912	\$ 451,288	\$ 455,857	\$ 460,194	\$ 475,800	\$ 483,729	\$ 491,122	\$ 5,567,185
Loads: 2010	12,285	12,346	23,791	39,321	35,309	28,052	41,652	36,395	41,942	60,188	31,072	20,960	383,223
Loads: 2011	15,529	92,987	46,345	68,752	27,121	72,185	67,641	67,006	52,691	14,003	2,315	9,826	536,201
12 Month Rolling Avg	32,189	38,909	40,796	43,249	42,566	46,244	48,410	50,961	51,856	48,008	45,611	44,683	533,482
Trans Cost	\$ 174,122	\$ 206,307	\$ 216,426	\$ 227,520	\$ 222,067	\$ 236,871	\$ 245,699	\$ 255,052	\$ 256,600	\$ 239,065	\$ 229,628	\$ 224,883	\$ 2,734,641
Loads: 2010	79,885	78,861	80,136	72,709	112,714	146,684	161,072	161,386	147,885	130,908	86,140	94,017	1,352,397
Loads: 2011	90,711	109,682	50,438	68,834	87,016	101,207	114,544	135,153	125,489	114,421	73,358	90,804	1,161,657
12 Month Rolling Avg	113,602	116,170	113,696	113,373	111,231	107,441	103,564	101,278	99,512	98,138	97,073	96,805	1,271,983
Trans Cost	\$ 614,514	\$ 616,146	\$ 603,166	\$ 595,898	\$ 580,292	\$ 580,335	\$ 525,627	\$ 507,382	\$ 492,417	\$ 489,800	\$ 488,714	\$ 487,206	\$ 6,551,496
Loads: 2010	-	-	23,000	21,000	29,000	69,000	54,000	29,000	28,000	2,000	2,000	-	259,000
Loads: 2011	-	0	1,917	3,853	6,250	12,000	16,500	18,917	21,250	21,417	21,583	21,583	145,250
12 Month Rolling Avg	-	-	10,770	20,147	32,606	61,466	83,744	94,677	105,152	106,891	108,660	108,624	732,136
Trans Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Loads: 2010	8,859	8,588	7,479	8,896	13,069	16,335	19,163	18,447	14,424	15,092	8,931	9,218	148,501
Loads: 2011	8,812	11,008	8,704	10,748	14,402	20,583	16,587	19,744	18,832	12,286	8,201	9,684	159,591
12 Month Rolling Avg	12,571	12,573	12,675	12,829	13,294	13,294	13,080	13,555	13,321	13,260	13,260	13,260	156,385
Trans Cost	\$ 66,519	\$ 66,685	\$ 67,242	\$ 67,430	\$ 67,508	\$ 68,095	\$ 66,386	\$ 66,004	\$ 67,074	\$ 66,484	\$ 66,757	\$ 66,932	\$ 803,517
Loads: 2010	2,995	2,898	2,365	3,208	3,869	5,218	6,122	6,055	4,861	5,480	3,104	2,743	48,918
Loads: 2011	2,793	3,619	3,664	3,949	4,407	6,887	5,635	7,458	7,108	4,299	3,051	3,247	56,117
12 Month Rolling Avg	4,609	4,120	4,228	4,290	4,335	4,474	4,433	4,550	4,737	4,639	4,634	4,676	53,176
Trans Cost	\$ 21,962	\$ 21,852	\$ 22,430	\$ 22,549	\$ 22,616	\$ 22,917	\$ 22,499	\$ 22,772	\$ 23,440	\$ 23,153	\$ 23,330	\$ 23,534	\$ 273,053
Total Network Loads: 2010	306,956	299,918	295,137	305,103	400,848	512,482	557,549	528,388	499,684	458,116	327,573	336,595	4,828,148
Total Network Loads: 2011	330,776	396,480	293,962	351,210	438,264	605,585	604,821	601,253	559,608	412,834	281,890	338,283	5,214,966
TOTAL Network loads 12 mo. rolling Avg	484,332	412,777	412,280	416,123	419,240	426,999	430,938	437,011	442,004	438,230	434,438	434,579	5,108,551
TOTAL NETWORK DOLLARS	\$ 2,179,115	\$ 2,178,185	\$ 2,177,729	\$ 2,177,293	\$ 2,177,569	\$ 2,178,213	\$ 2,178,361	\$ 2,178,335	\$ 2,178,619	\$ 2,179,003	\$ 2,179,064	\$ 2,179,393	\$ 26,140,880

# Southwest Transmission Cooperative/Arizona Electric Power Cooperative

Present Transmission Rates, Control Area Services and Revenue Requirements

	Point-to-Point	Network	
<b>Schedule 7&amp;8/Network Transmission Rates</b>	\$3.608	\$2,187,176	G-2A, Page 3 for Point-to-Point
	/kW-mo		G-2A, Page 12 for Network
<b>MANDATORY ANCILLARY SERVICES</b>			
Schedule 1 System Control & load Dispatch	\$0.245	\$0.245 /kW-mo	G-2A, Page 5
Schedule 2 Var support / voltage Control	\$0.049	\$0.067 /kW-mo	G-2A, Page 6
TOTAL MANDATORY SVCS	\$3.902		
<b>FERC OPTIONAL ANCILLARY SVCS - AEPCO</b>			
Schedule 3 Cost of Reg. & Frequency Response	Gen Cap Rate \$11.932	% Req'd 4.46%	\$/kW-mo \$0.5325 G-2A, Page 7
Schedule 5 Operating Reserves- Spinning	\$13.197	5.35%	\$0.7060 G-2A, Page 7
Schedule 6 Operating Reserve- Supplemental	\$9.299	5.36%	\$0.4981 G-2A, Page 7
Schedule 4 Energy Imbalance - AEPCO		Energy in kind deviation +/-1.5%	
	AEPCO pays positive imbalance	\$36.68 \$/MWh	G-2A, Page 10
	Customer pays negative imbalance	\$100.00 \$/MWh	
Non-FERC Replacement Capacity - AEPCO		\$4.245	G-2A, Page 7
Losses	0.0297		Loss Study

Notes:

\* Regulation Capacity as a Percentage of Regulated Load

12 CP Load	OS Sales	Reg. Load	NF Whl	Reg 12 CP	Reg Cap
506.12	123.00	383.12	65.00	448.12	20.00

\*\* Reserve percentages based on 2003 actual SRSG requirements and loads

Reg Pct  
4.46%

**Southwest Transmission Cooperative, Inc.****ANCILLARY SERVICE SCHEDULE 1 NEW RATE**

Network Customer	Units Before Adjustments	Present Revenue Before Adjustments	Units After Adjustments	Present Adjusted Revenue	Proposed Revenue
Anza	89,412	\$ 21,906	89,412	\$ 21,906	\$ 15,468
Duncan	61,986	15,187	61,986	15,187	10,724
Graham	358,226	87,765	358,226	87,765	61,973
Mohave	1,162,933	284,919	1,051,007	257,497	181,824
Mohave #2	310,769	76,138	310,769	76,138	53,763
Sulphur	1,171,000	286,895	1,171,000	286,895	202,583
Sulphur #2	289,375	70,897	536,201	131,369	92,763
Trico	1,161,657	284,606	1,161,657	284,606	200,967
Trico #2	259,000	63,455	259,000	63,455	44,807
Safford	159,591	39,100	159,591	39,100	27,609
Thatcher	56,117	13,749	56,117	13,749	9,708
<b>Total Network Customers</b>	<b>5,080,066</b>	<b>\$ 1,244,616</b>	<b>5,214,966</b>	<b>\$ 1,277,667</b>	<b>\$ 902,189</b>
<b>Firm Point-to-Point Customers</b>			<b>Units</b>		<b>Revenue</b>
AEPCO	1,176,000	\$ 288,120	3,780,000	926,100	\$ 653,940
Sulphur Springs Firm Point to Point	480,000	117,600	-	-	-
Mohave	-	-	108,000	26,460	18,684
FMI Safford Mine Wheeling	120,000	29,400	120,000	29,400	20,760
<b>Total for Firm Point-to-Point Customers</b>	<b>1,776,000</b>	<b>\$ 435,120</b>	<b>4,008,000</b>	<b>\$ 981,960</b>	<b>\$ 693,384</b>
<b>Network &amp; Firm Pt to Pt Customers</b>	<b>6,856,066</b>	<b>\$ 1,679,736</b>	<b>9,222,966</b>	<b>\$ 2,259,627</b>	<b>\$ 1,595,573</b>
<b>Other Customers</b>	<b>631,881</b>	<b>\$ 154,811</b>	<b>631,881</b>	<b>\$ 154,811</b>	<b>\$ 109,315</b>
<b>Total System Control</b>	<b>7,487,947</b>	<b>\$ 1,834,547</b>	<b>9,854,847</b>	<b>\$ 2,414,437</b>	<b>\$ 1,704,888</b>
<b>Less Adjustment for CAWCD</b>			<b>145,306</b>	<b>35,600</b>	<b>25,138</b>
<b>New Schedule 1 Revenue Credit</b>			<b>9,709,540</b>	<b>\$ 2,378,838</b>	<b>\$ 1,679,751</b>

H



# Southwest Transmission Cooperative, Inc.

## Summary of Revenue by Detailed Class

Test Year - Annualized

LINE NO.	CLASS OF SERVICE	REVENUES IN TEST YEAR		PROPOSED INCREASE (c)	
		PRESENT	PROPOSED	AMOUNT	PERCENT
1.	NETWORK SERVICES	\$ 27,418,546	\$ 19,493,698 (a)	\$ (7,924,849)	-28.90%
2	POINT-TO-POINT SERVICES	16,603,844	11,771,480 (b)	(4,832,365)	-29.10%
3.	TOTAL NETWORK, PT-TO-PT & SCHED 1	\$ 44,022,391	\$ 31,265,177	\$ (12,757,213)	-28.98%

SUPPORTING SCHEDULES:

(a) H-2, Page 1

(b) G-2A, Pages 11 & 14

RECAP SCHEDULES:

(c) A-1

**Southwest Transmission Cooperative, Inc.**  
Summary of Revenue by Detailed Class  
Test Year - Annualized

LINE NO.	CLASS OF SERVICE	CONSUMPTION		REVENUE		PROPOSED INCREASE	
		CUSTOMERS	(a)	PRESENT	(a)	AMOUNT	(a)
Class A MEMBER CONTRACTS:							
1.	ANZA	1	89,412	89,412	\$ 493,029	\$ 353,807	\$ (139,222)
2.	DUNCAN	1	61,986	61,986	329,158	236,204	(92,955)
3.	GRAHAM	1	358,226	358,226	1,878,062	1,347,682	(530,380)
4.	MOHAVE	1	1,051,007	1,051,007	5,504,038	3,949,650	(1,554,388)
5.	MOHAVE 2	1	310,769	310,769	1,733,060	1,062,013	(671,047)
6.	SULPHUR	1	1,171,000	1,171,000	5,854,080	4,200,681	(1,653,399)
7.	SULPHUR 2	1	536,201	536,201	2,866,010	2,056,657	(809,353)
8.	TRICO 1	1	1,161,657	1,161,657	6,836,102	4,905,951	(1,930,150)
9.	TRICO 2	1	259,000	259,000	795,591	570,594	(224,997)
10.	Class A TOTAL MEMBER CONTRACTS:	9	4,999,258	4,999,258	\$ 26,289,128	\$ 18,683,238	\$ (7,605,890)

OTHER FIRM NETWORK CONTRACTS:

1.	SAFFORD	1	159,591	159,591	\$ 842,617	\$ 604,658	\$ (237,958)
2.	THATCHER	1	56,117	56,117	286,801	205,802	(80,999)
3.	TOTAL FIRM CONTRACTS:	2	215,708	215,708	\$ 1,129,418	\$ 810,460	\$ (318,957)
4.	TOTAL COMPANY (b)	11	5,214,966	5,214,966	\$ 27,418,546	\$ 19,493,699	\$ (7,924,849)

SUPPORTING SCHEDULES:  
(a) H-2, Pages 2-12

RECAP SCHEDULES:  
(b) H-1

## Southwest Transmission Cooperative, Inc.

Analysis of Revenue by Detailed Class

Test Year - Annualized

ANZA

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
PRESENT RATE:													
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:													
3. Loads: 2010	7,236	7,764	6,324	4,980	5,928	7,920	10,296	9,612	9,480	5,424	8,880	8,784	92,628
4. Loads: 2011	6,744	7,368	5,988	5,424	5,760	8,436	10,524	9,396	8,400	6,804	7,164	7,404	89,412
5. 12 Month Rolling Avg.	7,678	7,645	7,617	7,654	7,640	7,683	7,702	7,684	7,594	7,709	7,566	7,451	91,623
PROPOSED:													
6. Loads: 2010	7,236	7,764	6,324	4,980	5,928	7,920	10,296	9,612	9,480	5,424	8,880	8,784	92,628
7. Loads: 2011	6,744	7,368	5,988	5,424	5,760	8,436	10,524	9,396	8,400	6,804	7,164	7,404	89,412
8. 12 Month Rolling Avg.	7,678	7,645	7,617	7,654	7,640	7,683	7,702	7,684	7,594	7,709	7,566	7,451	91,623
PRESENT REVENUE:													
9. Network Services	\$ 41,533	\$ 40,548	\$ 40,409	\$ 40,230	\$ 39,858	\$ 39,354	\$ 39,091	\$ 38,457	\$ 37,578	\$ 38,475	\$ 38,091	\$ 37,500	\$ 471,123
10. Scheduling & Ld. Control	1,652	1,805	1,467	1,329	1,411	2,067	2,578	2,302	2,058	1,667	1,755	1,814	21,906
11. Total	\$ 43,185	\$ 42,353	\$ 41,876	\$ 41,559	\$ 41,269	\$ 41,421	\$ 41,669	\$ 40,759	\$ 39,636	\$ 40,142	\$ 39,846	\$ 39,314	\$ 493,029
12. Average Cost (\$/KW)	\$ 6,404	\$ 5,748	\$ 6,993	\$ 7,662	\$ 7,165	\$ 4,910	\$ 3,959	\$ 4,338	\$ 4,719	\$ 5,900	\$ 5,562	\$ 5,310	\$ 5,514
PROPOSED REVENUE:													
13. Network Services	\$ 29,827	\$ 29,120	\$ 29,020	\$ 28,891	\$ 28,624	\$ 28,262	\$ 28,073	\$ 27,618	\$ 26,986	\$ 27,631	\$ 27,355	\$ 26,931	\$ 338,339
14. Scheduling & Ld. Control	1,167	1,275	1,036	938	996	1,459	1,821	1,626	1,453	1,177	1,239	1,281	15,468
15. Total	\$ 30,994	\$ 30,394	\$ 30,056	\$ 29,830	\$ 29,621	\$ 29,722	\$ 29,894	\$ 29,244	\$ 28,440	\$ 28,808	\$ 28,595	\$ 28,212	\$ 353,807
16. Average Cost (\$/KW)	\$ 4,596	\$ 4,125	\$ 5,019	\$ 5,500	\$ 5,142	\$ 3,523	\$ 2,841	\$ 3,112	\$ 3,386	\$ 4,234	\$ 3,991	\$ 3,810	\$ 3,957
CHANGE IN TOTAL COST:													
17. REVENUE	\$ (12,191)	\$ (11,959)	\$ (11,820)	\$ (11,729)	\$ (11,648)	\$ (11,699)	\$ (11,775)	\$ (11,516)	\$ (11,196)	\$ (11,334)	\$ (11,252)	\$ (11,102)	\$ (139,222)
18. PERCENT INC.	-28.23%	-28.24%	-28.23%	-28.22%	-28.23%	-28.24%	-28.26%	-28.25%	-28.25%	-28.23%	-28.24%	-28.24%	-28.24%

## Southwest Transmission Cooperative, Inc.

Analysis of Revenue by Detailed Class  
Test Year - Annualized

## DUNCAN VALLEY

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
PRESENT RATE:													
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
PROPOSED RATE:													
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:													
3. Loads: 2010	3,800	3,620	3,640	3,260	5,274	5,568	6,622	6,696	5,338	4,668	4,120	4,462	57,068
4. Loads: 2011	4,304	5,306	3,854	3,808	5,380	7,406	6,954	6,748	6,084	4,422	3,588	4,132	61,986
5. 12 Month Rolling Avg.	4,798	4,938	4,956	5,002	5,011	5,164	5,191	5,196	5,258	5,237	5,193	5,166	61,110
PROPOSED:													
6. Loads: 2010	3,800	3,620	3,640	3,260	5,274	5,568	6,622	6,696	5,338	4,668	4,120	4,462	57,068
7. Loads: 2011	4,304	5,306	3,854	3,808	5,380	7,406	6,954	6,748	6,084	4,422	3,588	4,132	61,986
8. 12 Month Rolling Avg.	4,798	4,938	4,956	5,002	5,011	5,164	5,191	5,196	5,258	5,237	5,193	5,166	61,110
PRESENT REVENUE:													
9. Network Services	\$ 25,954	\$ 26,190	\$ 26,292	\$ 26,291	\$ 26,142	\$ 26,451	\$ 26,346	\$ 26,005	\$ 26,018	\$ 26,138	\$ 26,144	\$ 26,000	\$ 313,972
10. Scheduling & Ld. Control	1,954	1,300	944	933	1,318	1,814	1,704	1,653	1,491	1,083	879	1,012	15,187
11. Total	\$ 27,909	\$ 27,490	\$ 27,236	\$ 27,224	\$ 27,460	\$ 28,266	\$ 28,050	\$ 27,658	\$ 27,509	\$ 27,221	\$ 27,023	\$ 27,012	\$ 329,158
12. Average Cost (\$/KW)	\$ 6.275	\$ 5.181	\$ 7.067	\$ 7.149	\$ 5.104	\$ 3.817	\$ 4.034	\$ 4.099	\$ 4.522	\$ 6.156	\$ 7.532	\$ 6.537	\$ 5.310
PROPOSED REVENUE:													
13. Network Services	\$ 18,639	\$ 18,809	\$ 18,882	\$ 18,881	\$ 18,774	\$ 18,996	\$ 18,921	\$ 18,676	\$ 18,685	\$ 18,771	\$ 18,776	\$ 18,672	\$ 225,480
14. Scheduling & Ld. Control	745	918	667	659	931	1,281	1,203	1,167	1,053	765	621	715	10,724
15. Total	\$ 19,384	\$ 19,727	\$ 19,548	\$ 19,540	\$ 19,705	\$ 20,277	\$ 20,124	\$ 19,843	\$ 19,738	\$ 19,536	\$ 19,396	\$ 19,387	\$ 236,204
16. Average Cost (\$/KW)	\$ 4.504	\$ 3.718	\$ 5.072	\$ 5.131	\$ 3.663	\$ 2.738	\$ 2.894	\$ 2.941	\$ 3.244	\$ 4.418	\$ 5.406	\$ 4.692	\$ 3.811
CHANGE IN TOTAL COST:													
17. REVENUE	\$ (7,625)	\$ (7,764)	\$ (7,688)	\$ (7,684)	\$ (7,755)	\$ (7,988)	\$ (7,926)	\$ (7,815)	\$ (7,771)	\$ (7,685)	\$ (7,627)	\$ (7,625)	\$ (92,955)
18. PERCENT INC.	-28.23%	-28.24%	-28.23%	-28.23%	-28.24%	-28.26%	-28.26%	-28.26%	-28.25%	-28.23%	-28.22%	-28.23%	-28.24%

**Southwest Transmission Cooperative, Inc.**  
Analysis of Revenue by Detailed Class  
Test Year - Annualized

**GRAHAM COUNTY ELECTRIC**

LINE NO.		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>PRESENT RATE:</b>														
1.	Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
<b>PROPOSED RATE:</b>														
2.	Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
<b>PRESENT:</b>														
3.	Loads: 2010	19,401	19,361	18,756	19,187	28,764	35,530	39,841	40,290	32,315	28,648	21,817	21,288	325,198
4.	Loads: 2011	22,019	24,442	24,082	24,262	30,252	44,283	40,089	40,545	39,290	25,523	20,126	23,313	358,226
5.	12 Month Rolling Avg.	27,318	27,741	28,185	28,608	28,732	29,462	29,482	29,504	30,085	29,824	29,683	29,852	348,476
<b>PROPOSED:</b>														
6.	Loads: 2010	19,401	19,361	18,756	19,187	28,764	35,530	39,841	40,290	32,315	28,648	21,817	21,288	325,198
7.	Loads: 2011	22,019	24,442	24,082	24,262	30,252	44,283	40,089	40,545	39,290	25,523	20,126	23,313	358,226
8.	12 Month Rolling Avg.	27,318	27,741	28,185	28,608	28,732	29,462	29,482	29,504	30,085	29,824	29,683	29,852	348,476
<b>PRESENT REVENUE :</b>														
9.	Network Services	\$ 147,773	\$ 147,133	\$ 149,524	\$ 150,366	\$ 149,895	\$ 150,910	\$ 149,632	\$ 147,663	\$ 148,870	\$ 148,850	\$ 149,439	\$ 150,241	\$ 1,790,296
10.	Scheduling & Ld. Control	5,395	5,988	5,900	5,944	7,412	10,849	9,822	9,934	9,626	6,253	4,931	5,712	87,765
11.	Total	\$ 153,167	\$ 153,122	\$ 155,424	\$ 156,310	\$ 157,307	\$ 161,760	\$ 159,454	\$ 157,597	\$ 158,496	\$ 155,103	\$ 154,370	\$ 155,953	\$ 1,878,062
<b>PROPOSED REVENUE:</b>														
12.	Average Cost (\$/KW)	\$ 6,956	\$ 6,265	\$ 6,454	\$ 6,443	\$ 5,200	\$ 3,653	\$ 3,978	\$ 3,887	\$ 4,034	\$ 6,077	\$ 7,670	\$ 6,690	\$ 5,243
<b>CHANGE IN TOTAL COST:</b>														
13.	Network Services	\$ 106,124	\$ 105,665	\$ 107,381	\$ 107,986	\$ 107,648	\$ 108,377	\$ 107,459	\$ 106,045	\$ 106,912	\$ 106,897	\$ 107,320	\$ 107,896	\$ 1,285,709
14.	Scheduling & Ld. Control	3,809	4,228	4,166	4,197	5,234	7,661	6,935	7,014	6,797	4,415	3,482	4,033	61,973
15.	Total	\$ 109,933	\$ 109,893	\$ 111,547	\$ 112,183	\$ 112,881	\$ 116,038	\$ 114,395	\$ 113,059	\$ 113,709	\$ 111,312	\$ 110,802	\$ 111,929	\$ 1,347,682
16.	Average Cost (\$/KW)	\$ 4,993	\$ 4,496	\$ 4,632	\$ 4,624	\$ 3,731	\$ 2,620	\$ 2,854	\$ 2,788	\$ 2,894	\$ 4,361	\$ 5,505	\$ 4,801	\$ 3,762
<b>CHANGE IN TOTAL COST:</b>														
17.	REVENUE	\$ (43,234)	\$ (43,229)	\$ (43,876)	\$ (44,127)	\$ (44,425)	\$ (45,712)	\$ (45,060)	\$ (44,537)	\$ (44,787)	\$ (43,790)	\$ (43,568)	\$ (44,023)	\$ (530,380)
18.	PERCENT INC.	-28.23%	-28.23%	-28.23%	-28.23%	-28.24%	-28.27%	-28.26%	-28.26%	-28.26%	-28.21%	-28.22%	-28.22%	-28.24%

## Southwest Transmission Cooperative, Inc.

Analysis of Revenue by Detailed Class

Test Year - Annualized

## MOHAVE ELECTRIC 1

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
PRESENT RATE:													
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:													
3. Loads: 2010	73,495	69,480	64,736	74,784	86,600	103,424	117,720	112,728	102,036	88,640	70,031	68,112	1,031,786
4. Loads: 2011	76,064	43,864	56,688	56,660	102,432	121,232	116,434	117,463	116,777	100,433	65,087	77,873	1,051,007
5. 12 Month Rolling Avg.	86,196	84,062	83,391	81,881	83,200	84,684	84,577	84,971	86,200	87,182	86,770	87,584	1,020,698
PROPOSED:													
6. Loads: 2010	73,495	69,480	64,736	74,784	86,600	103,424	117,720	112,728	102,036	88,640	70,031	68,112	1,031,786
7. Loads: 2011	76,064	43,864	56,688	56,660	102,432	121,232	116,434	117,463	116,777	100,433	65,087	77,873	1,051,007
8. 12 Month Rolling Avg.	86,196	84,062	83,391	81,881	83,200	84,684	84,577	84,971	86,200	87,182	86,770	87,584	1,020,698
PRESENT REVENUE:													
9. Network Services	\$ 466,265	\$ 445,850	\$ 442,395	\$ 430,373	\$ 434,055	\$ 433,769	\$ 429,261	\$ 425,267	\$ 426,545	\$ 435,119	\$ 436,843	\$ 440,798	\$ 5,246,541
10. Power Factor Adjustment	334	2,638	1,393	1,745	570	1,008	805	751	764	1,411	3,337	1,770	16,526
11. Chemstar Load Control	-	-	-	-	-	-	-	-	-	(10,167)	-	-	(10,167)
12. Scheduling & Ld. Control	18,636	10,747	13,889	13,882	25,096	29,702	28,526	28,778	28,610	24,606	15,946	19,079	257,497
13. Total	\$ 485,235	\$ 459,235	\$ 457,677	\$ 446,000	\$ 459,720	\$ 464,478	\$ 458,592	\$ 454,797	\$ 455,919	\$ 450,969	\$ 456,127	\$ 461,647	\$ 5,510,397
14. Average Cost (\$/KW)	\$ 6.379	\$ 10.470	\$ 8.074	\$ 7.872	\$ 4.488	\$ 3.831	\$ 3.939	\$ 3.872	\$ 3.904	\$ 4.490	\$ 7.008	\$ 5.928	\$ 5.243
PROPOSED REVENUE:													
15. Network Services	\$ 334,850	\$ 320,189	\$ 317,708	\$ 309,074	\$ 311,718	\$ 311,513	\$ 308,275	\$ 305,408	\$ 306,325	\$ 312,483	\$ 313,721	\$ 316,561	\$ 3,767,826
16. Power Factor Adjustment	334	2,638	1,393	1,745	570	1,008	805	751	764	1,411	3,337	1,770	16,526
17. Chemstar Load Control	-	-	-	-	-	-	-	-	-	-	-	-	-
18. Scheduling & Ld. Control	13,159	7,588	9,807	9,802	17,721	20,973	20,143	20,321	20,202	17,375	11,260	13,472	181,824
19. Total	\$ 348,343	\$ 330,416	\$ 328,908	\$ 320,622	\$ 330,009	\$ 333,494	\$ 329,224	\$ 326,480	\$ 327,291	\$ 331,269	\$ 328,318	\$ 331,803	\$ 3,966,176
20. Average Cost (\$/KW)	\$ 4.580	\$ 7.533	\$ 5.802	\$ 5.659	\$ 3.222	\$ 2.751	\$ 2.828	\$ 2.779	\$ 2.803	\$ 3.298	\$ 5.044	\$ 4.261	\$ 3.774
CHANGE IN TOTAL COST:													
21. REVENUE	\$ (136,891)	\$ (128,819)	\$ (128,769)	\$ (125,378)	\$ (129,712)	\$ (130,985)	\$ (129,369)	\$ (128,317)	\$ (128,628)	\$ (119,701)	\$ (127,809)	\$ (129,844)	\$ (1,544,221)
22. PERCENT INC.	-28.21%	-28.05%	-28.14%	-28.11%	-28.22%	-28.20%	-28.21%	-28.21%	-28.21%	-26.54%	-28.02%	-28.13%	-28.02%

**Southwest Transmission Cooperative, Inc.**  
Analysis of Revenue by Detailed Class  
Test Year - Annualized

## MOHAVE ELECTRIC 2

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>PRESENT RATE:</b>													
1. MEC Network Revenue Requirement	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 2,056,562	\$ 24,678,748
<b>PROPOSED RATE:</b>													
2. MEC Network Service 2 Rev. Req.	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 1,251,434	\$ 15,017,214
<b>PRESENT:</b>													
3. Loads: 2010	-	-	-	9,758	24,321	56,751	59,061	46,779	49,403	35,068	5,278	13,011	299,430
4. Loads: 2011	-	41,204	17,199	29,773	16,494	38,366	56,413	52,740	41,937	16,643	-	-	310,769
5. 12 Month Rolling Avg	24,953	28,386	29,819	31,487	30,835	29,303	29,082	29,579	28,957	27,422	26,982	25,897	342,702
<b>PROPOSED:</b>													
6. Loads: 2010	-	-	-	9,758	24,321	56,751	59,061	46,779	49,403	35,068	5,278	13,011	299,430
7. Loads: 2011	-	41,204	17,199	29,773	16,494	38,366	56,413	52,740	41,937	16,643	-	-	310,769
8. 12 Month Rolling Avg.	24,953	28,386	29,819	31,487	30,835	29,303	29,082	29,579	28,957	27,422	26,982	25,897	342,702
<b>PRESENT REVENUE:</b>													
9. Network Services	\$ 126,919	\$ 141,564	\$ 148,745	\$ 155,615	\$ 151,260	\$ 141,133	\$ 138,788	\$ 139,198	\$ 134,732	\$ 128,688	\$ 127,729	\$ 122,553	\$ 1,656,922
10. Scheduling & L.d. Control	-	10,095	4,214	7,294	4,041	9,400	13,821	12,921	10,275	4,078	-	-	76,138
11. Total	\$ 126,919	\$ 151,659	\$ 152,959	\$ 162,909	\$ 155,301	\$ 150,532	\$ 152,609	\$ 152,119	\$ 145,006	\$ 132,766	\$ 127,729	\$ 122,553	\$ 1,733,060
12. Average Cost (\$/KW)	\$ -	\$ 3,681	\$ 8,893	\$ 5,472	\$ 9,416	\$ 3,924	\$ 2,705	\$ 2,884	\$ 3,458	\$ 7,977	\$ -	\$ -	\$ 5,577
<b>PROPOSED REVENUE:</b>													
13. Network Services	\$ 77,231	\$ 86,143	\$ 90,513	\$ 94,693	\$ 92,043	\$ 85,880	\$ 84,453	\$ 84,703	\$ 81,985	\$ 78,308	\$ 77,724	\$ 74,574	\$ 1,008,250
14. Scheduling & L.d. Control	-	7,128	2,975	5,151	2,853	6,637	9,759	9,124	7,255	2,879	-	-	53,763
15. Total	\$ 77,231	\$ 93,271	\$ 93,488	\$ 99,844	\$ 94,896	\$ 92,518	\$ 94,213	\$ 93,827	\$ 89,240	\$ 81,187	\$ 77,724	\$ 74,574	\$ 1,062,013
16. Average Cost (\$/KW)	\$ -	\$ 2,264	\$ 5,436	\$ 3,353	\$ 5,753	\$ 2,411	\$ 1,670	\$ 1,779	\$ 2,128	\$ 4,878	\$ -	\$ -	\$ 3,417
<b>CHANGE IN TOTAL COST:</b>													
17. REVENUE	\$ (49,688)	\$ (58,388)	\$ (59,471)	\$ (63,066)	\$ (60,405)	\$ (58,015)	\$ (58,396)	\$ (58,292)	\$ (55,766)	\$ (51,579)	\$ (50,005)	\$ (47,978)	\$ (671,047)
18. PERCENT INC.	-39.15%	-38.50%	-38.88%	-38.71%	-38.90%	-38.54%	-38.27%	-38.32%	-38.46%	-38.85%	-39.15%	-39.15%	-38.72%

**Southwest Transmission Cooperative, Inc.**  
Analysis of Revenue by Detailed Class  
Test Year - Annualized

SULPHUR SPRINGS VALLEY 1

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>PRESENT RATE:</b>													
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
<b>PROPOSED RATE:</b>													
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
<b>PRESENT:</b>													
3. Loads: 2010	99,000	97,000	88,000	69,000	85,000	107,000	96,000	90,000	92,000	84,000	88,000	94,000	1,089,000
4. Loads: 2011	104,000	57,000	54,000	56,000	116,000	116,000	116,000	116,000	115,000	112,000	97,000	112,000	1,171,000
5. 12 Month Rolling Avg.	91,167	87,833	85,000	83,917	86,500	87,250	88,917	91,083	93,000	95,333	96,083	97,583	1,083,666
<b>PROPOSED:</b>													
6. Loads: 2010	99,000	97,000	88,000	69,000	85,000	107,000	96,000	90,000	92,000	84,000	88,000	94,000	1,089,000
7. Loads: 2011	104,000	57,000	54,000	56,000	116,000	116,000	116,000	116,000	115,000	112,000	97,000	112,000	1,171,000
8. 12 Month Rolling Avg.	91,167	87,833	85,000	83,917	86,500	87,250	88,917	91,083	93,000	95,333	96,083	97,583	1,083,666
<b>PRESENT REVENUE :</b>													
9. Network Services	\$ 493,155	\$ 465,851	\$ 450,931	\$ 441,075	\$ 451,271	\$ 446,912	\$ 451,288	\$ 455,857	\$ 460,104	\$ 475,800	\$ 483,729	\$ 491,122	\$ 5,567,185
10. Scheduling & Ld. Control	25,480	13,965	13,230	13,720	28,420	28,420	28,420	28,420	28,175	27,440	23,765	27,440	286,895
11. Total	\$ 518,635	\$ 479,816	\$ 464,161	\$ 454,795	\$ 479,691	\$ 475,332	\$ 479,708	\$ 484,277	\$ 488,369	\$ 503,240	\$ 507,494	\$ 518,562	\$ 5,854,080
12. Average Cost (\$/KW)	\$ 4,987	\$ 8,418	\$ 8,596	\$ 8,121	\$ 4,135	\$ 4,098	\$ 4,135	\$ 4,175	\$ 4,247	\$ 4,493	\$ 5,232	\$ 4,630	\$ 4,999
<b>PROPOSED REVENUE:</b>													
13. Network Services	\$ 354,161	\$ 334,553	\$ 323,838	\$ 316,760	\$ 324,082	\$ 320,952	\$ 324,094	\$ 327,376	\$ 330,490	\$ 341,698	\$ 347,392	\$ 352,701	\$ 3,998,098
14. Scheduling & Ld. Control	17,992	9,861	9,342	9,688	20,068	20,068	20,068	20,068	19,895	19,376	16,781	19,376	202,583
15. Total	\$ 372,153	\$ 344,414	\$ 333,180	\$ 326,448	\$ 344,150	\$ 341,020	\$ 344,162	\$ 347,444	\$ 350,385	\$ 361,074	\$ 364,173	\$ 372,077	\$ 4,200,681
16. Average Cost (\$/KW)	\$ 3,578	\$ 6,042	\$ 6,170	\$ 5,829	\$ 2,967	\$ 2,940	\$ 2,967	\$ 2,995	\$ 3,047	\$ 3,224	\$ 3,754	\$ 3,322	\$ 3,587
<b>CHANGE IN TOTAL COST:</b>													
17. REVENUE	\$ (146,482)	\$ (135,402)	\$ (130,981)	\$ (128,347)	\$ (135,541)	\$ (134,312)	\$ (135,546)	\$ (136,833)	\$ (137,984)	\$ (142,166)	\$ (143,321)	\$ (146,485)	\$ (1,653,399)
18. PERCENT INC.	-28.24%	-28.22%	-28.22%	-28.22%	-28.26%	-28.26%	-28.26%	-28.26%	-28.25%	-28.25%	-28.24%	-28.25%	-28.24%



## Southwest Transmission Cooperative, Inc.

Analysis of Revenue by Detailed Class

Test Year - Annualized

SULPHUR SPRINGS VALLEY 2

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
PRESENT RATE:													
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:													
3. Loads: 2010	12,285	12,346	23,701	39,321	35,309	28,052	41,652	36,395	41,942	60,188	31,072	20,960	383,223
4. Loads: 2011	15,329	92,987	46,345	68,752	27,121	72,185	67,641	67,006	52,691	14,003	2,315	9,826	536,201
5. 12 Month Rolling Avg.	32,189	38,909	40,796	43,249	42,566	46,244	48,410	50,961	51,856	48,008	45,611	44,683	533,482
PROPOSED:													
6. Loads: 2010	12,285	12,346	23,701	39,321	35,309	28,052	41,652	36,395	41,942	60,188	31,072	20,960	383,223
7. Loads: 2011	15,329	92,987	46,345	68,752	27,121	72,185	67,641	67,006	52,691	14,003	2,315	9,826	536,201
8. 12 Month Rolling Avg.	32,189	38,909	40,796	43,249	42,566	46,244	48,410	50,961	51,856	48,008	45,611	44,683	533,482
PRESENT REVENUE:													
9. Network Services	\$ 174,122	\$ 206,367	\$ 216,426	\$ 227,320	\$ 222,067	\$ 236,871	\$ 245,699	\$ 255,052	\$ 256,600	\$ 239,605	\$ 229,628	\$ 224,883	\$ 2,734,641
10. Scheduling & Ld. Control	3,756	22,782	11,355	16,844	6,645	17,685	16,572	16,416	12,909	3,431	567	2,407	131,369
11. Total	\$ 177,877	\$ 229,148	\$ 227,780	\$ 244,164	\$ 228,712	\$ 254,557	\$ 262,271	\$ 271,469	\$ 269,509	\$ 243,035	\$ 230,196	\$ 227,291	\$ 2,866,010
12. Average Cost (\$/KW)	\$ 11,604	\$ 2,464	\$ 4,915	\$ 3,551	\$ 8,433	\$ 3,526	\$ 3,877	\$ 4,051	\$ 5,115	\$ 17,356	\$ 99,437	\$ 23,132	\$ 5,345
PROPOSED REVENUE:													
13. Network Services	\$ 125,046	\$ 148,203	\$ 155,427	\$ 163,251	\$ 159,478	\$ 170,110	\$ 176,450	\$ 183,167	\$ 184,278	\$ 172,073	\$ 164,909	\$ 161,501	\$ 1,963,894
14. Scheduling & Ld. Control	2,652	16,087	8,018	11,894	4,692	12,488	11,702	11,592	9,116	2,423	400	1,700	92,763
15. Total	\$ 127,698	\$ 164,290	\$ 163,445	\$ 175,145	\$ 164,170	\$ 182,598	\$ 188,152	\$ 194,759	\$ 193,394	\$ 174,496	\$ 165,309	\$ 163,201	\$ 2,056,657
16. Average Cost (\$/KW)	\$ 8,330	\$ 1,767	\$ 3,527	\$ 2,547	\$ 6,053	\$ 2,530	\$ 2,782	\$ 2,907	\$ 3,670	\$ 12,461	\$ 71,408	\$ 16,609	\$ 3,836
CHANGE IN TOTAL COST:													
17. REVENUE	\$ (50,179)	\$ (64,859)	\$ (64,336)	\$ (69,019)	\$ (64,541)	\$ (71,958)	\$ (74,119)	\$ (76,710)	\$ (76,115)	\$ (68,540)	\$ (64,886)	\$ (64,090)	\$ (809,353)
18. PERCENT INC.	-28.21%	-28.30%	-28.24%	-28.27%	-28.22%	-28.27%	-28.26%	-28.26%	-28.24%	-28.20%	-28.19%	-28.20%	-28.24%

## Southwest Transmission Cooperative, Inc.

Analysis of Revenue by Detailed Class  
Test Year - Annualized

## TRICO ELECTRIC 1

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
PRESENT RATE:													
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
PROPOSED RATE:													
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:													
3. Loads: 2010	79,885	78,861	80,136	72,709	112,714	146,684	161,072	161,386	147,885	130,908	86,140	94,017	1,352,397
4. Loads: 2011	90,711	109,682	50,438	68,834	87,016	101,207	114,544	135,153	125,489	114,421	73,358	90,804	1,161,657
5. 12 Month Rolling Avg.	113,602	116,170	113,696	113,373	111,231	107,441	103,564	101,378	99,512	98,138	97,073	96,805	1,271,983
PROPOSED:													
6. Loads: 2010	79,885	78,861	80,136	72,709	112,714	146,684	161,072	161,386	147,885	130,908	86,140	94,017	1,352,397
7. Loads: 2011	90,711	109,682	50,438	68,834	87,016	101,207	114,544	135,153	125,489	114,421	73,358	90,804	1,161,657
8. 12 Month Rolling Avg.	113,602	116,170	113,696	113,373	111,231	107,441	103,564	101,378	99,512	98,138	97,073	96,805	1,271,983
PRESENT REVENUE:													
9. Direct Assignment Facilities	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 1,598,521
10. Power Factor Adjustment	3,002	1,086	6,662	1,539	1,493	902	892	1,625	427	664	3,346	1,487	23,125
11. Network Services	614,514	616,146	603,166	595,898	580,292	550,335	525,627	507,382	492,417	489,800	488,714	487,206	6,551,496
12. Scheduling & Ld. Control	22,224	26,872	12,357	16,864	21,319	24,796	28,063	33,112	30,745	28,033	17,973	22,247	284,606
13. Total	\$ 772,950	\$ 777,314	\$ 755,395	\$ 747,511	\$ 736,314	\$ 709,242	\$ 687,792	\$ 675,329	\$ 656,799	\$ 651,707	\$ 643,242	\$ 644,150	\$ 8,457,747
14. Average Cost (\$/KW)	\$ 8,521	\$ 7,087	\$ 14,977	\$ 10,860	\$ 8,462	\$ 7,908	\$ 6,005	\$ 4,997	\$ 5,234	\$ 5,696	\$ 8,769	\$ 7,094	\$ 7,281
PROPOSED REVENUE:													
15. Direct Assignment Facilities	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 1,598,521
16. Power Factor Adjustment	3,002	1,086	6,662	1,539	1,493	902	892	1,625	427	664	3,346	1,487	23,125
17. Network Services	441,316	442,488	433,166	427,946	416,739	395,225	377,481	364,379	353,631	351,752	350,972	349,889	4,704,985
18. Scheduling & Ld. Control	15,693	18,975	8,726	11,908	15,054	17,509	19,816	23,381	21,710	19,795	12,691	15,709	200,967
19. Total	\$ 593,221	\$ 595,759	\$ 581,764	\$ 574,603	\$ 566,496	\$ 546,846	\$ 531,399	\$ 525,595	\$ 508,978	\$ 505,421	\$ 500,219	\$ 500,296	\$ 6,527,597
20. Average Cost (\$/KW)	\$ 6,540	\$ 5,432	\$ 11,534	\$ 8,348	\$ 6,510	\$ 5,403	\$ 4,639	\$ 3,867	\$ 4,056	\$ 4,417	\$ 6,819	\$ 5,510	\$ 5,619
CHANGE IN TOTAL COST:													
21. REVENUE	\$ (179,729)	\$ (181,555)	\$ (173,631)	\$ (172,907)	\$ (169,818)	\$ (162,396)	\$ (156,393)	\$ (152,734)	\$ (147,821)	\$ (146,286)	\$ (143,024)	\$ (143,855)	\$ (1,930,150)
22. PERCENT INC.	-23.25%	-23.36%	-22.99%	-23.13%	-23.06%	-22.90%	-22.74%	-22.62%	-22.51%	-22.45%	-22.23%	-22.33%	-22.82%

## Southwest Transmission Cooperative, Inc.

Analysis of Revenue by Detailed Class

Test Year - Annualized

## TRICO ELECTRIC 2

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
PRESENT RATE:													
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:													
3. Loads: 2010	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Loads: 2011	-	-	23,000	23,000	29,000	69,000	54,000	29,000	28,000	2,000	2,000	-	259,000
5. 12 Month Rolling Avg.	-	-	1,917	3,833	6,250	12,000	16,500	18,917	21,250	21,417	21,583	21,583	145,250
PROPOSED:													
6. Loads: 2010	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Loads: 2011	-	-	23,000	23,000	29,000	69,000	54,000	29,000	28,000	2,000	2,000	-	259,000
8. 12 Month Rolling Avg.	-	-	1,917	3,833	6,250	12,000	16,500	18,917	21,250	21,417	21,583	21,583	145,250
PRESENT REVENUE:													
9. Network Services	\$ -	\$ -	\$ 10,170	\$ 20,147	\$ 32,606	\$ 61,466	\$ 83,744	\$ 94,677	\$ 105,152	\$ 106,891	\$ 108,660	\$ 108,624	\$ 732,136
10. Scheduling & Ld. Control	-	-	5,635	5,635	7,105	16,905	13,230	7,105	6,860	490	490	-	63,455
11. Total	\$ -	\$ -	\$ 15,805	\$ 25,782	\$ 39,711	\$ 78,371	\$ 96,974	\$ 101,782	\$ 112,012	\$ 107,381	\$ 109,150	\$ 108,624	\$ 795,591
12. Average Cost (\$/KW)	\$ -	\$ -	\$ 0.687	\$ 1.121	\$ 1.369	\$ 1.136	\$ 1.796	\$ 3.510	\$ 4.000	\$ 53.690	\$ 54.575	\$ -	\$ 3,072
PROPOSED REVENUE:													
13. Network Services	\$ -	\$ -	\$ 7,304	\$ 14,468	\$ 23,416	\$ 44,142	\$ 60,141	\$ 67,993	\$ 75,515	\$ 76,764	\$ 78,034	\$ 78,009	\$ 525,787
14. Scheduling & Ld. Control	-	-	3,979	3,979	5,017	11,937	9,342	5,017	4,844	346	346	-	44,807
15. Total	\$ -	\$ -	\$ 11,283	\$ 18,447	\$ 28,433	\$ 56,079	\$ 69,483	\$ 73,010	\$ 80,359	\$ 77,110	\$ 78,380	\$ 78,009	\$ 570,594
16. Average Cost (\$/KW)	\$ -	\$ -	\$ 0.491	\$ 0.802	\$ 0.980	\$ 0.813	\$ 1.287	\$ 2.518	\$ 2.870	\$ 38.555	\$ 39.190	\$ -	\$ 2,203
CHANGE IN TOTAL COST:													
17. REVENUE	\$ -	\$ -	\$ (4,522)	\$ (7,334)	\$ (11,278)	\$ (22,292)	\$ (27,491)	\$ (28,772)	\$ (31,653)	\$ (30,271)	\$ (30,769)	\$ (30,615)	\$ (224,997)
18. PERCENT INC.	-	-	-28.61%	-28.45%	-28.40%	-28.44%	-28.35%	-28.27%	-28.26%	-28.19%	-28.19%	-	-28.28%

**Southwest Transmission Cooperative, Inc.**  
Analysis of Revenue by Detailed Class  
Test Year - Annualized

Safford

LINE NO.		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1.	Network Revenue Requirement	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 2,187,176 \$	\$ 26,246,112
	PROPOSED RATE:													
2.	Network Revenue Requirement	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 1,570,730 \$	\$ 18,848,758
	PRESENT:													
3.	Loads: 2010	8,859	8,588	7,479	8,896	13,069	16,335	19,163	18,447	14,424	15,092	8,931	9,218	148,501
4.	Loads: 2011	8,812	11,008	8,704	10,748	14,402	20,583	16,587	19,744	18,832	12,286	8,201	9,684	159,591
5.	12 Month Rolling Avg.	12,371	12,573	12,675	12,829	12,940	13,294	13,080	13,188	13,555	13,321	13,260	13,299	156,385
	PROPOSED:													
6.	Loads: 2010	8,859	8,588	7,479	8,896	13,069	16,335	19,163	18,447	14,424	15,092	8,931	9,218	148,501
7.	Loads: 2011	8,812	11,008	8,704	10,748	14,402	20,583	16,587	19,744	18,832	12,286	8,201	9,684	159,591
8.	12 Month Rolling Avg.	12,371	12,573	12,675	12,829	12,940	13,294	13,080	13,188	13,555	13,321	13,260	13,299	156,385
	PRESENT REVENUE :													
9.	Network Services	\$ 66,919 \$	\$ 66,685 \$	\$ 67,242 \$	\$ 67,430 \$	\$ 67,508 \$	\$ 68,095 \$	\$ 66,386 \$	\$ 66,004 \$	\$ 67,074 \$	\$ 66,484 \$	\$ 66,757 \$	\$ 66,932 \$	\$ 803,517
10.	Scheduling & Ld. Control	2,159	2,697	2,132	2,633	3,528	5,043	4,064	4,837	4,614	3,010	2,009	2,373	39,100
11.	Total	\$ 69,078 \$	\$ 69,382 \$	\$ 69,374 \$	\$ 70,064 \$	\$ 71,036 \$	\$ 73,137 \$	\$ 70,450 \$	\$ 70,841 \$	\$ 71,688 \$	\$ 69,494 \$	\$ 68,767 \$	\$ 69,305 \$	\$ 842,617
12.	Average Cost (\$/KW)	\$ 7.839 \$	\$ 6.303 \$	\$ 7.970 \$	\$ 6.519 \$	\$ 4.932 \$	\$ 3.553 \$	\$ 4.247 \$	\$ 3.588 \$	\$ 3.807 \$	\$ 5.656 \$	\$ 8.385 \$	\$ 7.157 \$	\$ 5.280
	PROPOSED REVENUE:													
13.	Network Services	\$ 48,058 \$	\$ 47,890 \$	\$ 48,290 \$	\$ 48,425 \$	\$ 48,481 \$	\$ 48,902 \$	\$ 47,675 \$	\$ 47,401 \$	\$ 48,170 \$	\$ 47,746 \$	\$ 47,942 \$	\$ 48,068 \$	\$ 577,049
14.	Scheduling & Ld. Control	1,524	1,904	1,506	1,859	2,492	3,561	2,870	3,416	3,258	2,125	1,419	1,675	27,609
15.	Total	\$ 49,583 \$	\$ 49,795 \$	\$ 49,796 \$	\$ 50,285 \$	\$ 50,973 \$	\$ 52,463 \$	\$ 50,545 \$	\$ 50,817 \$	\$ 51,428 \$	\$ 49,871 \$	\$ 49,361 \$	\$ 49,743 \$	\$ 604,658
16.	Average Cost (\$/KW)	\$ 5.627 \$	\$ 4.523 \$	\$ 5.721 \$	\$ 4.679 \$	\$ 3.539 \$	\$ 2.549 \$	\$ 3.047 \$	\$ 2.574 \$	\$ 2.731 \$	\$ 4.059 \$	\$ 6.019 \$	\$ 5.137 \$	\$ 3.789
	CHANGE IN TOTAL COST:													
17.	REVENUE	\$ (19,495) \$	\$ (19,587) \$	\$ (19,579) \$	\$ (19,779) \$	\$ (20,064) \$	\$ (20,674) \$	\$ (19,905) \$	\$ (20,025) \$	\$ (20,261) \$	\$ (19,623) \$	\$ (19,406) \$	\$ (19,562) \$	\$ (237,958)
18.	PERCENT INC.	-28.22%	-28.23%	-28.22%	-28.23%	-28.24%	-28.27%	-28.25%	-28.27%	-28.26%	-28.24%	-28.22%	-28.23%	-28.24%

## Southwest Transmission Cooperative, Inc.

Analysis of Revenue by Detailed Class  
Test Year - Annualized

Thatcher

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
PROPOSED RATE:													
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:													
3. Loads: 2010	2,995	2,898	2,365	3,208	3,869	5,218	6,122	6,055	4,861	5,480	3,104	2,743	48,918
4. Loads: 2011	2,793	3,619	3,664	3,949	4,407	6,887	5,635	7,458	7,108	4,299	3,051	3,247	56,117
5. 12 Month Rolling Avg.	4,060	4,120	4,228	4,290	4,335	4,474	4,433	4,550	4,737	4,639	4,634	4,676	53,176
PROPOSED:													
6. Loads: 2010	2,995	2,898	2,365	3,208	3,869	5,218	6,122	6,055	4,861	5,480	3,104	2,743	48,918
7. Loads: 2011	2,793	3,619	3,664	3,949	4,407	6,887	5,635	7,458	7,108	4,299	3,051	3,247	56,117
8. 12 Month Rolling Avg.	4,060	4,120	4,228	4,290	4,335	4,474	4,433	4,550	4,737	4,639	4,634	4,676	53,176
PRESENT REVENUE :													
9. Network Services	\$ 21,962	\$ 21,852	\$ 22,430	\$ 22,549	\$ 22,616	\$ 22,917	\$ 22,499	\$ 22,772	\$ 23,440	\$ 23,153	\$ 23,330	\$ 23,534	\$ 273,053
10. Scheduling & Ld. Control	684	887	898	968	1,080	1,687	1,381	1,827	1,741	1,053	747	796	13,749
11. Total	\$ 22,646	\$ 22,738	\$ 23,328	\$ 23,516	\$ 23,695	\$ 24,604	\$ 23,880	\$ 24,599	\$ 25,182	\$ 24,206	\$ 24,077	\$ 24,329	\$ 286,801
12. Average Cost (\$/KW)	\$ 7,562	\$ 7,846	\$ 9,864	\$ 7,330	\$ 6,124	\$ 4,715	\$ 3,901	\$ 4,063	\$ 5,180	\$ 4,417	\$ 7,757	\$ 8,870	\$ 5,863
PROPOSED REVENUE:													
13. Network Services	\$ 15,772	\$ 15,693	\$ 16,108	\$ 16,193	\$ 16,242	\$ 16,458	\$ 16,158	\$ 16,354	\$ 16,834	\$ 16,627	\$ 16,754	\$ 16,901	\$ 196,094
14. Scheduling & Ld. Control	483	626	634	683	762	1,191	975	1,290	1,230	744	528	562	9,708
15. Total	\$ 16,255	\$ 16,319	\$ 16,742	\$ 16,877	\$ 17,004	\$ 17,649	\$ 17,133	\$ 17,644	\$ 18,063	\$ 17,371	\$ 17,282	\$ 17,463	\$ 205,802
16. Average Cost (\$/KW)	\$ 5,428	\$ 5,631	\$ 7,079	\$ 5,261	\$ 4,395	\$ 3,382	\$ 2,799	\$ 2,914	\$ 3,716	\$ 3,170	\$ 5,568	\$ 6,366	\$ 4,207
CHANGE IN TOTAL COST:													
17. REVENUE	\$ (6,391)	\$ (6,419)	\$ (6,586)	\$ (6,640)	\$ (6,691)	\$ (6,955)	\$ (6,747)	\$ (6,955)	\$ (7,118)	\$ (6,835)	\$ (6,795)	\$ (6,867)	\$ (80,999)
18. PERCENT INC.	-28.22%	-28.23%	-28.23%	-28.23%	-28.24%	-28.27%	-28.25%	-28.27%	-28.27%	-28.24%	-28.22%	-28.22%	-28.24%

**Southwest Transmission Cooperative, Inc.**  
Analysis of Revenue by Detailed Class  
Test Year - Annualized

## CLASS A MEMBER RATES

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
PRESENT RATE:													
1. Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
PROPOSED RATE:													
2. Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:													
3. Loads: 2010	295,102	288,432	285,293	292,999	383,910	490,929	532,264	503,886	480,399	437,544	315,338	324,634	4,630,730
4. Loads: 2011	319,171	381,853	281,594	336,513	419,455	578,115	582,599	574,051	533,668	396,249	270,638	325,352	4,999,258
5. 12 Month Rolling Avg.	387,901	395,684	395,377	399,004	401,965	409,231	413,425	419,273	423,712	420,270	416,544	416,604	4,898,990
PROPOSED:													
6. Loads: 2010	295,102	288,432	285,293	292,999	383,910	490,929	532,264	503,886	480,399	437,544	315,338	324,634	4,630,730
7. Loads: 2011	319,171	381,853	281,594	336,513	419,455	578,115	582,599	574,051	533,668	396,249	270,638	325,352	4,999,258
8. 12 Month Rolling Avg.	387,901	395,684	395,377	399,004	401,965	409,231	413,425	419,273	423,712	420,270	416,544	416,604	4,898,990
PRESENT REVENUE:													
9. Direct Assignment Facilities	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 1,598,521
10. Network Services	2,090,234	2,089,648	2,088,057	2,087,314	2,087,446	2,087,201	2,089,476	2,089,559	2,088,104	2,089,366	2,088,977	2,088,927	25,064,310
11. Power Factor Adjustment	3,336	3,724	8,055	3,284	2,063	1,910	1,697	2,376	1,191	2,075	6,683	3,257	39,651
12. Chemstar Load Control	-	-	-	-	-	-	-	-	-	(10,167)	-	-	(10,167)
13. Scheduling & Ld. Control	78,197	93,554	68,990	82,446	102,766	141,638	142,737	140,642	130,749	97,081	66,306	79,711	1,224,818
14. Total	\$ 2,304,977	\$ 2,320,137	\$ 2,298,313	\$ 2,306,253	\$ 2,325,485	\$ 2,363,959	\$ 2,367,120	\$ 2,365,788	\$ 2,353,255	\$ 2,311,565	\$ 2,295,176	\$ 2,305,106	\$ 27,917,133
AVERAGE COST (S/KW)													
15. Average Cost (S/KW)	\$ 6,794	\$ 5,717	\$ 7,660	\$ 6,448	\$ 5,222	\$ 3,855	\$ 3,831	\$ 3,885	\$ 4,158	\$ 5,518	\$ 7,964	\$ 6,666	\$ 5,259
(Excluding DAFs, PF & CLC))													
PROPOSED REVENUE:													
16. Direct Assignment Facilities	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 1,598,521
17. Network Services	1,487,194	1,485,168	1,483,238	1,481,951	1,482,523	1,483,458	1,485,349	1,485,363	1,484,808	1,486,377	1,486,203	1,486,734	17,818,367
18. Power Factor Adjustment	3,336	3,724	8,055	3,284	2,063	1,910	1,697	2,376	1,191	2,075	6,683	3,257	39,651
19. Chemstar Load Control	-	-	-	-	-	-	-	-	-	-	-	-	-
20. Scheduling & Ld. Control	55,217	66,061	48,716	58,217	72,566	100,014	100,790	99,311	92,325	68,551	46,820	56,286	864,872
21. Total	\$ 1,678,957	\$ 1,688,163	\$ 1,673,219	\$ 1,676,661	\$ 1,690,362	\$ 1,718,591	\$ 1,721,046	\$ 1,720,260	\$ 1,711,534	\$ 1,690,213	\$ 1,672,916	\$ 1,679,488	\$ 20,321,410
AVERAGE COST (S/KW)													
22. Average Cost (S/KW)	\$ 4,833	\$ 4,062	\$ 5,440	\$ 4,577	\$ 3,707	\$ 2,739	\$ 2,723	\$ 2,761	\$ 2,955	\$ 3,924	\$ 5,664	\$ 4,743	\$ 3,737
(Excluding DAFs, PF & CLC))													
CHANGE IN TOTAL COST:													
23. REVENUE	\$ (626,020)	\$ (508,727)	\$ (625,094)	\$ (629,592)	\$ (635,123)	\$ (645,368)	\$ (646,075)	\$ (645,528)	\$ (641,720)	\$ (621,352)	\$ (622,260)	\$ (625,618)	\$ (7,595,723)
24. PERCENT INC.	-27.16%	-21.93%	-27.20%	-27.30%	-27.31%	-27.30%	-27.29%	-27.29%	-27.27%	-26.88%	-27.11%	-27.14%	-27.21%

**Southwest Transmission Cooperative, Inc.**  
Analysis of Revenue by Detailed Class  
Test Year - Annualized

Total For Network Tariff														
LINE NO.		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2011														
1.	Network Revenue Requirement	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 2,187,176	\$ 26,246,112
PROPOSED RATE:														
2.	Network Revenue Requirement	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 1,570,730	\$ 18,848,758
PRESENT:														
3.	Loads: 2010	306,956	299,918	295,137	305,103	400,848	512,482	557,549	528,388	499,684	458,116	327,373	336,595	4,828,148
4.	Loads: 2011	330,776	396,480	293,962	351,210	438,264	605,585	604,821	601,253	559,608	412,834	281,890	338,283	5,214,966
5.	12 Month Rolling Avg.	404,332	412,377	412,280	416,123	419,240	426,999	430,938	437,011	442,004	438,230	434,438	434,579	5,108,551
PROPOSED:														
6.	Loads: 2010	306,956	299,918	295,137	305,103	400,848	512,482	557,549	528,388	499,684	458,116	327,373	336,595	4,828,148
7.	Loads: 2011	330,776	396,480	293,962	351,210	438,264	605,585	604,821	601,253	559,608	412,834	281,890	338,283	5,214,966
8.	12 Month Rolling Avg.	404,332	412,377	412,280	416,123	419,240	426,999	430,938	437,011	442,004	438,230	434,438	434,579	5,108,551
PRESENT REVENUE :														
9.	Direct Assignment Facilities	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 1,598,521
10.	Network Services	2,179,115	2,178,185	2,177,729	2,177,293	2,177,569	2,178,213	2,178,361	2,178,335	2,178,619	2,179,003	2,179,064	2,179,393	26,140,880
11.	Power Factor Adjustment	3,336	3,724	8,055	3,284	2,063	1,910	1,697	2,376	1,191	2,075	6,683	3,257	39,651
12.	Chemstar Load Control	-	-	-	-	-	-	-	-	-	(10,167)	-	-	(10,167)
13.	Scheduling & Ld. Control	81,040	97,138	72,021	86,046	107,375	148,368	148,181	147,307	137,104	101,144	69,063	82,879	1,277,667
14.	Total	\$ 2,396,702	\$ 2,412,257	\$ 2,391,015	\$ 2,399,833	\$ 2,420,217	\$ 2,461,701	\$ 2,461,450	\$ 2,461,228	\$ 2,450,124	\$ 2,405,265	\$ 2,388,020	\$ 2,398,739	\$ 29,046,551
15.	Average Cost (\$/KW) (Excluding DAFs, PF & CLC))	\$ 6.833	\$ 5.739	\$ 7.653	\$ 6.444	\$ 5.214	\$ 3.842	\$ 3.847	\$ 3.868	\$ 4.138	\$ 5.523	\$ 7.975	\$ 6.688	\$ 5.258
PROPOSED REVENUE:														
16.	Direct Assignment Facilities	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 133,210	\$ 1,598,521
17.	Network Services	1,551,025	1,548,751	1,547,636	1,546,570	1,547,246	1,548,818	1,549,182	1,549,118	1,549,812	1,550,750	1,550,899	1,551,703	18,591,510
18.	Power Factor Adjustment	3,336	3,724	8,055	3,284	2,063	1,910	1,697	2,376	1,191	2,075	6,683	3,257	39,651
19.	Chemstar Load Control	-	-	-	-	-	-	-	-	-	-	-	-	-
20.	Scheduling & Ld. Control	57,224	68,591	50,855	60,759	75,820	104,766	104,634	104,017	96,812	71,420	48,767	58,523	902,189
21.	Total	\$ 1,744,795	\$ 1,754,276	\$ 1,739,756	\$ 1,743,823	\$ 1,758,339	\$ 1,788,704	\$ 1,788,723	\$ 1,788,721	\$ 1,781,025	\$ 1,757,455	\$ 1,739,559	\$ 1,746,693	\$ 21,131,870
22.	Average Cost (\$/KW) (Excluding DAFs, PF & CLC))	\$ 4.862	\$ 4.079	\$ 5.438	\$ 4.577	\$ 3.703	\$ 2.731	\$ 2.734	\$ 2.749	\$ 2.942	\$ 3.929	\$ 5.675	\$ 4.760	\$ 3.738
CHANGE IN TOTAL COST:														
23.	REVENUE	\$ (651,906)	\$ (657,981)	\$ (651,258)	\$ (656,010)	\$ (661,879)	\$ (672,997)	\$ (672,727)	\$ (672,507)	\$ (669,099)	\$ (647,810)	\$ (648,461)	\$ (652,046)	\$ (7,914,681)
24.	PERCENT INC.	-27.20%	-27.28%	-27.24%	-27.34%	-27.35%	-27.34%	-27.33%	-27.32%	-27.31%	-26.93%	-27.15%	-27.18%	-27.25%

# Southwest Transmission Cooperative, Inc.

Analysis of Revenue by Detailed Class

Test Year - Annualized

## AVERAGE COST-CLASS A MEMBERS

LINE NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
AVG COST (\$/KW) - PRESENT RATES													
1. Anza	\$ 6,404	\$ 5,748	\$ 6,993	\$ 7,662	\$ 7,165	\$ 4,910	\$ 3,959	\$ 4,338	\$ 4,719	\$ 5,900	\$ 5,562	\$ 5,310	\$ 5,514
2. Duncan	\$ 6,275	\$ 5,181	\$ 7,067	\$ 7,149	\$ 5,104	\$ 3,817	\$ 4,034	\$ 4,099	\$ 4,522	\$ 6,156	\$ 7,532	\$ 6,537	\$ 5,310
3. Graham	\$ 6,956	\$ 6,265	\$ 6,454	\$ 6,443	\$ 5,200	\$ 3,653	\$ 3,978	\$ 3,887	\$ 4,034	\$ 6,077	\$ 7,670	\$ 6,690	\$ 5,243
4. Mohave 1	\$ -	\$ 3,681	\$ 8,893	\$ 7,872	\$ 9,416	\$ 3,831	\$ 3,939	\$ 3,872	\$ 3,904	\$ 4,490	\$ 7,008	\$ 5,928	\$ 5,243
5. Mohave 2	\$ -	\$ 3,681	\$ 8,893	\$ 7,872	\$ 9,416	\$ 3,831	\$ 3,939	\$ 3,872	\$ 3,904	\$ 4,490	\$ 7,008	\$ 5,928	\$ 5,243
6. Sulphur 1	\$ 4,987	\$ 8,418	\$ 8,596	\$ 8,121	\$ 4,135	\$ 4,098	\$ 4,135	\$ 4,175	\$ 4,247	\$ 4,493	\$ 5,232	\$ 4,630	\$ 4,999
7. Sulphur 2	\$ 11,604	\$ 2,464	\$ 4,915	\$ 3,551	\$ 8,433	\$ 3,526	\$ 3,877	\$ 4,051	\$ 5,115	\$ 17,356	\$ 99,437	\$ 23,132	\$ 5,345
8. Trico 1	\$ 8,521	\$ 7,087	\$ 14,977	\$ 10,860	\$ 8,462	\$ 7,008	\$ 6,005	\$ 4,997	\$ 5,234	\$ 5,696	\$ 8,769	\$ 7,094	\$ 7,281
9. Trico 2	\$ -	\$ -	\$ 0,687	\$ 1,121	\$ 1,369	\$ 1,136	\$ 1,796	\$ 3,510	\$ 4,000	\$ 53,690	\$ 54,575	\$ -	\$ 3,072
10. CLASS A MEMBER AVG.	\$ 6,794	\$ 5,717	\$ 7,660	\$ 6,448	\$ 5,222	\$ 3,855	\$ 3,831	\$ 3,885	\$ 4,158	\$ 5,518	\$ 7,964	\$ 6,666	\$ 5,259

## AVG COST (\$/KW) - PROPOSED RATES

11. Anza	\$ 4,596	\$ 4,125	\$ 5,019	\$ 5,500	\$ 5,142	\$ 3,523	\$ 2,841	\$ 3,112	\$ 3,386	\$ 4,234	\$ 3,991	\$ 3,810	\$ 3,957
12. Duncan	\$ 4,504	\$ 3,718	\$ 5,072	\$ 5,131	\$ 3,663	\$ 2,738	\$ 2,894	\$ 2,941	\$ 3,244	\$ 4,418	\$ 5,406	\$ 4,692	\$ 3,811
13. Graham	\$ 4,993	\$ 4,496	\$ 4,632	\$ 4,624	\$ 3,731	\$ 2,620	\$ 2,854	\$ 2,788	\$ 2,894	\$ 4,361	\$ 5,505	\$ 4,801	\$ 3,762
14. Mohave 1	\$ 4,580	\$ 7,533	\$ 5,802	\$ 5,659	\$ 3,222	\$ 2,751	\$ 2,828	\$ 2,779	\$ 2,803	\$ 3,298	\$ 5,044	\$ 4,261	\$ 3,774
15. Mohave 2	\$ -	\$ 2,264	\$ 5,436	\$ 3,353	\$ 5,753	\$ 2,411	\$ 1,670	\$ 1,779	\$ 2,128	\$ 4,878	\$ -	\$ -	\$ 3,417
16. Sulphur 1	\$ 3,578	\$ 6,042	\$ 6,170	\$ 5,829	\$ 2,967	\$ 2,940	\$ 2,967	\$ 2,995	\$ 3,047	\$ 3,224	\$ 3,754	\$ 3,322	\$ 3,587
17. Sulphur 2	\$ 8,330	\$ 1,767	\$ 3,527	\$ 2,547	\$ 6,053	\$ 2,530	\$ 2,782	\$ 2,907	\$ 3,670	\$ 12,461	\$ 71,408	\$ 16,609	\$ 3,836
18. Trico 1	\$ 6,540	\$ 5,432	\$ 11,534	\$ 8,348	\$ 6,510	\$ 5,403	\$ 4,639	\$ 3,867	\$ 4,056	\$ 4,417	\$ 6,819	\$ 5,510	\$ 5,619
19. Trico 2	\$ -	\$ -	\$ 0,491	\$ 0,802	\$ 0,980	\$ 0,813	\$ 1,287	\$ 2,518	\$ 2,870	\$ 38,555	\$ 39,190	\$ -	\$ 2,203
20. CLASS A MEMBER AVG.	\$ 4,833	\$ 4,062	\$ 5,440	\$ 4,577	\$ 3,707	\$ 2,739	\$ 2,723	\$ 2,761	\$ 2,955	\$ 3,924	\$ 5,664	\$ 4,743	\$ 3,737



**Southwest Transmission Cooperative, Inc.**

### Analysis of Revenue by Detailed Class

Test Year - Annualized

**BILLING UNIT AND TRANSMISSION REVENUE SUMMARY WORKSHEET  
POINT TO POINT TRANSMISSION SERVICES - PRESENT RATES**

		2011														
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL		
AEPSCO Bundled Sales	Firm Pt to Pt - Serv	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	315,000	3,780,000		
	Rate p/p	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	3,608		
	Firm Pt to Pt - Serv	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 1,136,520	\$ 13,638,240		
	Loads	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	3,608		
Sulphur Springs Firm Point to Point	Rate P/P	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
	Total Dollars P/P	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
	Loads	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	108,000		
Mohave Firm Point to Point	Rate P/P	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	3,608		
	Total Dollars P/P	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 32,472	\$ 389,664		
	Loads	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	120,000		
FMI Safford Mine Whwhealing	Rate p/p	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	\$ 3,608	3,608		
	Total Dollars P/P	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 36,080	\$ 432,960		
	Loads	1,205,072	1,205,072	1,205,072	1,205,072	1,205,072	1,205,072	1,205,072	1,205,072	1,205,072	1,205,072	1,205,072	1,205,072	14,460,864		
Total Revenue	Total Loads	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	334,000	4,008,000		
	Load Control & Disp	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	\$ 81,830	981,960		
	Total Revenue	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 1,286,902	\$ 15,442,824		

## POINT TO POINT TRANSMISSION SERVICES-PROPOSED RATES

[illegible]

# Southwest Transmission Cooperative, Inc.

### Analysis of Revenue by Detailed Class

Test Year - Annualized

**TOTAL FOR POINT-TO-POINT TARIFF**

### POINT-TO-POINT TARIFF-PRESENT RATES

[illegible]

### POINT-TO-POINT TARIFF-PROPOSED RATES

[illegible]

**Southwest Transmission Cooperative, Inc.**  
CHANGES IN REPRESENTATIVE RATE SCHEDULES

Line No.	RATE DESCRIPTION	PRESENT	PROPOSED	CHANGE
<b>1. Transmission Services:</b>				
2.	Firm Network Service - \$ Monthly Rev. Req.	\$ 2,187,176	\$ 1,570,730	\$ (616,446)
3.	Firm Network Service - \$ Annual Rev. Req.	\$ 26,246,111	\$ 18,848,758	\$ (7,397,353)
4.	Firm Network Service - Mohave Electric 2 \$ Monthly Rev. Req.	\$ 2,056,562	\$ 1,251,434	\$ (805,128)
5.	Firm Network Service - Mohave Electric 2 \$ Annual Rev. Req.	\$ 24,678,748	\$ 15,017,214	\$ (9,661,534)
6.	Firm Point-to-Point Transmission - \$/kW	\$ 3.608	\$ 2.558	\$ (1.050)
<b>7. Mandatory Ancillary Services:</b>				
8.	Schedule 1 - Network - System Control & Load Dispatch - \$/kW/mo.	\$ 0.245	\$ 0.173	\$ (0.072)
9.	Schedule 1 - Point-to-Point - System Control & Load Dispatch - \$/kW/mo.	\$ 0.245	\$ 0.173	\$ (0.072)
10.	Schedule 2 - Network - Var Support/Voltage Control - \$/kW/mo.	\$ 0.067	\$ 0.096	\$ 0.029
11.	Schedule 2 - Point-to-Point - Var Support/Voltage Control - \$/kW/mo.	\$ 0.049	\$ 0.070	\$ 0.020
<b>12. FERC Optional Ancillary Services</b>				
13.	Schedule 3 - Network - Reg. & Freq. Resp. - \$/kW/mo.	\$ 0.5325	\$ 0.2602	\$ (0.2723)
14.	Schedule 4 - Network - Energy Imbalance - Eng. In Kind +/- 1.5% \$/MWh			
15.	AEPCO Pays Positive Imbalance	\$ 36.68	\$ 32.63	\$ (4.05)
16.	Customer Pays Negative Imbalance	\$100.00	\$100.00	\$ -
17.	Schedule 5 - Network - Operating Reserves - Spinning - \$/kW/mo.	\$ 0.7060	\$ 0.7232	\$ 0.0172
18.	Schedule 6 - Network - Operating Reserves - Supplemental - \$/kW/mo.	\$ 0.4981	\$ 0.5009	\$ 0.0028
<b>19. Direct Assignment Facilities</b>				
20.	Trico Electric Only - \$/mo.	\$ 133,210	\$ 133,210	\$ -

**Southwest Transmission Cooperative, Inc.**  
**TYPICAL BILL ANALYSIS**

**THIS SCHEDULE IS NOT APPLICABLE**

**Southwest Transmission Cooperative, Inc.**  
**BILL COUNT**

**THIS SCHEDULE IS NOT APPLICABLE**



**BEFORE THE ARIZONA CORPORATION COMMISSION**

**TESTIMONY**

**IN SUPPORT OF**

**THE SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

**APPLICATION**

**for**

**GENERAL RATE RELIEF**

**DOCKET NO. E-04100A**

**AUGUST 2012**

A



**DIRECT TESTIMONY OF PETER SCOTT**  
**ON BEHALF OF**  
**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**GENERAL RATES APPLICATION**

**August 2012**

1                                   **DIRECT TESTIMONY OF PETER SCOTT**

2                                   **ON BEHALF OF**

3                                   **SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

4                                   **INTRODUCTION**

5    **Q.     Please state your name and business address.**

6    A.     My name is Peter Scott. My business address is 1000 South Highway 80,  
7            Benson, Arizona, 85602.

8    **Q.     By whom are you employed and in what capacity?**

9    A.     I am the Director of Financial Operations for Sierra Southwest Cooperative  
10            Services ("Sierra Southwest") and supervise the financial activities of the  
11            cooperative. In addition, under agreements that Sierra Southwest has with  
12            Arizona Electric Power Cooperative, Inc. ("AEPCO") and Southwest  
13            Transmission Cooperative, Inc. ("SWTC"), I am responsible for the same  
14            functions, as well as rate design and implementation, for these two cooperatives.  
15            As Director of Financial Operations, I serve on the Division Managers Group and  
16            report directly to the Chief Financial Officer. My specific responsibilities for  
17            SWTC include establishing fiscal policy, procedures development and  
18            implementation of appropriate financial controls. I am also responsible for  
19            financial planning, rate design development and implementation, corporate  
20            treasury functions, as well as cash and working capital management and inventory  
21            control.

1 Q. Please briefly describe your educational background and work-related  
2 experience.

3 A. I hold a Bachelor of Arts Degree in History from Colorado College and  
4 completed my graduate and undergraduate Accounting and Finance studies at the  
5 University of Arizona. I began my employment with Sierra Southwest in  
6 December of 2011. Prior to joining Sierra Southwest, I worked in the  
7 biotechnology manufacturing industry for 11 years, most recently serving as  
8 Finance Director at Labcyte Inc. I previously worked as Accounting Manager in  
9 the commercial printing industry for six years.

10 Q. What is the purpose of your testimony?

11 A. I will provide the Commission information concerning SWTC, its Board and  
12 membership structure and its rate history. I'll also describe, generally, the rate  
13 request and certain related issues. Gary Pierson, our Manager of Financial  
14 Services, testifies in greater detail concerning the A-H rate filing schedules which  
15 are filed in relation to and in support of SWTC's rate request.

16 **BACKGROUND**

17 Q. Please describe SWTC.

18 A. SWTC is a not-for-profit transmission cooperative which was formed in  
19 anticipation of the restructuring of AEPCO. The Commission approved the  
20 restructuring in Decision No. 63868. On August 1, 2001, AEPCO's transmission  
21 assets were transferred to SWTC and it commenced operations. SWTC primarily  
22 provides wholesale transmission services to AEPCO in relation to its six Class A  
23 Member distribution cooperatives (the "distribution cooperatives"). These  
24 Class A Members of AEPCO are also Class A Members of SWTC. One  
25 distribution cooperative, Anza Electric Cooperative, Inc., is located in south-

1 central California. The other five Arizona distribution cooperatives are Duncan  
2 Valley Electric Cooperative, Inc.; Graham County Electric Cooperative, Inc.;  
3 Trico Electric Cooperative, Inc. ("TRICO"); Mohave Electric Cooperative, Inc.  
4 ("MEC"); and Sulphur Springs Valley Electric Cooperative, Inc. ("SSVEC").  
5 They provide electricity at retail primarily to rural communities throughout the  
6 State.

7 **Q. Does SWTC have Class B Members?**

8 A. Yes. AEPCO is a Class B Member of SWTC, as is Sierra Southwest, which was  
9 the third cooperative formed as part of AEPCO's restructuring.

10 **Q. Does SWTC have transmission agreements with other entities?**

11 A. SWTC has umbrella service agreements under its Open Access Transmission  
12 Tariff ("OATT") which enable entities to conduct real time transactions on  
13 SWTC's Same Time Information System. To date, AEPCO, MEC, SSVEC,  
14 TRICO and several other entities have requested transmission services from  
15 SWTC under an umbrella service agreement. SWTC also provides OATT-based  
16 wholesale transmission service to the City of Safford and the Town of Thatcher  
17 and it has pre-OATT transmission agreements with the Avra Valley Irrigation and  
18 Drainage District and the Silverbell Irrigation and Drainage District. From time  
19 to time, SWTC also enters into Network transmission and firm and nonfirm Point-  
20 to-Point transmission service agreements with other Eligible Customers pursuant  
21 to the terms of its Commission-approved tariffs and its OATT.

22 **Q. Is SWTC regulated by agencies other than the Commission?**

23 A. Yes. SWTC is a borrower from the Rural Utilities Service ("RUS") which is a  
24 division of the United States Department of Agriculture. As an RUS borrower,

1 SWTC is subject to its regulation—both by virtue of its mortgage and also  
2 pursuant to regulations promulgated by RUS. SWTC is also a “transmitting  
3 utility” under Section 211 of the Federal Power Act. As a transmitting utility,  
4 SWTC is subject to certain jurisdiction of the Federal Energy Regulatory  
5 Commission (“FERC”). In order to meet the requirements for reciprocity under  
6 FERC Order No. 888, SWTC maintains an OATT. SWTC is also a member of  
7 the Western Electricity Coordinating Council and, as a transmission utility, is  
8 subject to compliance with Electric Reliability Organization standards.

9 **Q. Please briefly describe SWTC’s transmission facilities.**

10 A. SWTC owns about 620 miles of transmission lines and 24 substations. Some of  
11 those transmission facilities are jointly owned with the Salt River Project and  
12 Tucson Electric Power. We also have contracts to receive transmission service  
13 from those companies, as well as Arizona Public Service Company, the Western  
14 Area Power Administration and Southern California Edison.

15 **Q. How is SWTC governed and managed?**

16 A. SWTC’s Board of Directors oversees all aspects of our operations. It is  
17 comprised of 13 directors. Twelve of the Board members (two per Class A  
18 Member) are the distribution cooperatives’ representatives. The remaining  
19 SWTC Board member represents AEPCO and Sierra Southwest, our Class B  
20 Members. AEPCO, SWTC and Sierra Southwest operate collectively as  
21 Arizona’s G&T Cooperatives. They are managed by one Chief Executive Officer  
22 and a Division Managers Group.

1 Q. Mr. Scott, please describe SWTC's most recent rate history.

2 A. SWTC's current rates were authorized by the Commission in Decision No. 72030.

3 They became effective on January 1, 2011.

4 Q. Did SWTC's Board approve this rate filing?

5 A. Yes, it did. The process of Board review began several months ago and the

6 SWTC Board of Directors approved the filing of this rate case in June.

7 **OVERVIEW OF FILING**

8 Q. Please summarize SWTC's rate request.

9 A. Mr. Pierson provides more detail concerning the specifics of the request and the  
10 revised rates. The primary reasons for this rate filing are (1) to implement  
11 SWTC's revised depreciation rates based upon a study supporting longer, useful  
12 lives for the system and (2) to recognize increased revenues from a new 205 MW  
13 Point-to-Point transmission agreement with AEPCO. Because these factors either  
14 decrease expenses or increase revenues, SWTC is requesting a substantial  
15 decrease in its Network service and Point-to-Point rates. However, although  
16 SWTC is requesting a rate decrease of approximately 29%, the proposed rates are  
17 designed to produce a TIER of 1.88 and a DSCR of 1.35 which, if achieved, will  
18 keep SWTC in compliance with the standards required by its RUS mortgage and  
19 RUS rules. Those coverages will also provide modest margins, allow continued  
20 equity building and afford gradual improvement in working capital coverage.

21 SWTC requests that the new rates take effect at the same time as new AEPCO  
22 rates are implemented, so both cooperatives' new rate schedules will coincide  
23 with the increased transmission revenues flowing to SWTC and the additional  
24 wheeling expenses incurred by AEPCO under the new 205 MW Point-to-Point

1 contract. SWTC also requests that a Transmission Revenue Adjustor be  
2 implemented as discussed later in my testimony.

3 **Q. What level of margins is SWTC requesting in this rate application?**

4 A. SWTC is requesting operating margins of about \$4.4 million. On a cash basis, the  
5 requested margins would generate approximately \$3.0 million of working capital  
6 on an annual basis. We have reviewed our working capital needs going forward  
7 and determined that about \$10 million is necessary to support ongoing operational  
8 requirements and the general fund levels necessary to support SWTC's  
9 construction program. The requested level of margins will gradually build toward  
10 that level over the next several years and, as well, be more than adequate to assure  
11 mortgage compliance. It will also continue to improve SWTC's equity position.

12 **Q. What is SWTC's current equity position?**

13 A. As of December 31, 2011, equity as a percentage of total capitalization was  
14 10.84%. That is higher than the 9.21% we had projected in our most recent  
15 financial forecast and is also an improvement over the equity level discussed at  
16 the time of our last rate case hearing in 2010. The margin level requested here  
17 should continue to improve this equity position.

18 **Q. Mr. Scott, is SWTC requesting Commission approval of a change in its  
19 depreciation rates pursuant to the requirements of R14-2-102.C.1.?**

20 A. Yes. SWTC contracted with Burns & McDonnell ("B&M") to conduct a life  
21 assessment study of the SWTC transmission system. A copy of B&M's June  
22 2012 study is attached as Exhibit PS-1. Table ES-1, 2012 Depreciation Rate  
23 Study, at page ES-5 of the study summarizes the Proposed Depreciation Rate for

1 each category of Transmission Plant. That table is attached to this testimony as  
2 Exhibit PS-2. SWTC requests Commission approval of the rates as stated.

3 **Q. Please describe SWTC's proposal for a Transmission Revenue Adjustor**  
4 **("TRA") mechanism.**

5 A. SWTC requests Commission approval to implement a TRA, which will allow its  
6 monthly Network transmission rate to increase or decrease based upon either the  
7 loss or the acquisition of a long-term Point-to-Point transmission service  
8 agreement. Mr. Pierson provides more details concerning this request, but the  
9 basic concept is to hold authorized revenues constant, regardless of the addition or  
10 loss of a Point-to-Point contract of more than one year in duration. The proposed  
11 TRA is based on the same level of revenue requirements authorized by the  
12 Commission in its Decision in this rate filing.

13 **Q. Why is SWTC requesting this adjustor mechanism?**

14 A. The TRA would allow SWTC to adjust its Network transmission rate in direct  
15 response to actual changes in Point-to-Point billing units without requiring the  
16 time and expense of a formal rate filing and without affecting our approved  
17 revenue requirements. It would allow new Point-to-Point revenues to reduce our  
18 members' and customers' Network rates on a more real-time basis. Also,  
19 responsive to the concerns expressed by the Commission in SWTC's recent loan  
20 approvals and its last rate cases regarding the financial stability and equity  
21 position of the cooperative, another benefit of the TRA is that it would afford  
22 additional protection against any unanticipated decrease in Point-to-Point  
23 revenues.



**CONCLUSION**

1

2   **Q.   Please summarize SWTC's requests.**

3   A.   SWTC asks that the Commission approve the new rates to be effective on  
4       November 1, 2013 or at the same time as implementation of AEPCO's new rates.  
5       We also request approval of the revised depreciation rates stated in Exhibit PS-2,  
6       as well as the proposed TRA mechanism.

7   **Q.   Does this conclude your direct testimony?**

8   A.   Yes, it does.

# Exhibit PS-1

**Report on the  
Comprehensive Depreciation Study**

prepared for

**Southwest Transmission Cooperative, Inc.  
Benson, Arizona**

June 2012

Project No. 65700

prepared by

**Burns & McDonnell Engineering Company, Inc.  
Kansas City, Missouri**

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June 19, 2012

Mr. Charles Walling, P.E.  
Manager of Engineering  
Southwest Transmission Cooperative, Inc.  
1000 S. Highway 80  
Benson, AZ 85602

Re: 2012 Comprehensive Depreciation Study  
Project No. 65700

Dear Mr. Walling:

This report encompasses the Comprehensive Depreciation Study (the Study, report), completed by Burns & McDonnell Engineering Company (Burns & McDonnell) on behalf of Southwest Transmission Cooperative, Inc. (SWTC), for SWTC's transmission assets as of December 31, 2011. The Study was prepared in accordance with Burns & McDonnell's letter and scope of service dated December 20, 2011. The Study was performed for all transmission facilities accounted for in accordance with Rural Utilities Service (RUS) Bulletin 1767B-1, Uniform System of Accounts.

The depreciation rates developed as part of this study must be approved by the RUS before implementation by SWTC. This Study reflects the results of Burns & McDonnell's engineering assessment and analysis of the remaining useful lives of SWTC's transmission system assets and presents our proposed transmission system depreciation rates.

The Study presents the proposed remaining life estimates and the corresponding proposed depreciation rates for each account of SWTC's transmission system. This Study also provides comparisons of SWTC's annual depreciation expense calculated using both the existing and the proposed depreciation rates based on the transmission assets in service as of December 31, 2011. This comparison shows the proposed depreciation rates would result in a decrease in depreciation expense of approximately \$1.35 million per year.

This report represents the completion of Burns & McDonnell's scope of services for the Comprehensive Depreciation Study on behalf of SWTC. Our project manager and team of engineers who participated in the project would like to extend appreciation to the staff for their assistance during the project. We also are available to discuss this report and Burns & McDonnell's findings with you at your convenience.

Sincerely,  
Burns & McDonnell

Ted J. Kelly  
Principal & Project Director

TJK/jes

## TABLE OF CONTENTS

	<u>Page No.</u>
<b>EXECUTIVE SUMMARY</b>	
Introduction.....	ES-1
Engineering Assessment.....	ES-2
Depreciation Rate Analysis.....	ES-3
Summary & Conclusions .....	ES-6
Statement of Limiting Conditions.....	ES-6
 <b>PART I – INTRODUCTION</b>	
Southwest Transmission Cooperative.....	I-2
Purpose of Study .....	I-2
Project Approach .....	I-2
Sources of Data.....	I-4
 <b>PART II – ENGINEERING ASSESSMENT</b>	
Overview.....	II-1
Transmission Substations.....	II-1
Other Transmission System Assets.....	II-13
Operations and Maintenance.....	II-14
Useful Service Life .....	II-28
 <b>PART III – DEPRECIATION RATE ANALYSIS</b>	
Study Scope & Purpose .....	III-1
Depreciation Rate Study Methods .....	III-2
Depreciation Rate Analysis.....	III-5
 <b>PART IV – SUMMARY &amp; CONCLUSIONS</b>	

## LIST OF TABLES

<u>Table No.</u>	<u>Page No.</u>
ES-1 2012 Depreciation Rate Study Summary.....	ES-5
III-1 2012 Depreciation Rate Study Summary.....	III-6

## APPENDIX A: DETAILED DEPRECIATION RATE CALCULATIONS

**EXECUTIVE SUMMARY**

## EXECUTIVE SUMMARY

This report describes the Comprehensive Depreciation Study (the Study), completed by Burns & McDonnell Engineering Company (Burns & McDonnell) on behalf of Southwest Transmission Cooperative, Inc. (SWTC; or the Cooperative), pertaining to SWTC's transmission assets in service as of December 31, 2011. The Study was prepared in accordance with a Burns & McDonnell letter proposal dated December 20, 2011.

### INTRODUCTION

The Study desired by SWTC was to be performed for all SWTC transmission facilities accounted for in accordance with Rural Utilities Service (RUS) Bulletin 1767B-1. SWTC requires a comprehensive depreciation study be performed in accordance with RUS Bulletin 1767B-1, Uniform System of Accounts every five years.

Much of the data used in the analysis of SWTC's depreciation rates was provided by the Cooperative's staff. This included various computer-generated accounting records, certain performance results, budgets, inspection reports, technical documents such as maps and a Construction Work Plan, procedure manuals, and other documents. Historical data from 1952 to 2011 that was recorded in SWTC's accounting system was used throughout the analyses.

In addition, site visits were conducted to inspect several of SWTC's transmission substations, associated transmission lines, and the headquarters office in Benson, Arizona on April 17 to 19, 2012. Key transmission, maintenance, and accounting staff were interviewed and the condition of the facilities was assessed during these site visits. The physical site observations of the system facilities did not include any internal inspections or examinations, environmental testing, or the completion of any performance tests on the equipment and facilities. No mathematical modeling analysis was included in the scope of the facilities observations.

The transmission engineers and depreciation consultants then applied their experience and engineering judgment in approximating the useful lives of SWTC's transmission facilities. The projected remaining useful lives of the various transmission assets were then developed and

factored into the depreciation rate analysis performed by Burns & McDonnell's depreciation consultants. The Study also included analysis of the service life characteristics; projected net salvage values; and depreciation reserves for the transmission assets.

Generally accepted depreciation study procedures widely used by the utility industry were followed. Actuarial analysis of average service lives and dispersions based on historical characteristics of the RUS account since inception were developed. The Whole Life method and Life Span method were used to calculate the proposed depreciation rate for each account based on industry standards and account history

## **ENGINEERING ASSESSMENT**

The estimated useful lives for SWTC's transmission assets were based, in part, on the following.

- SWTC's records of operation, maintenance and component replacements
- SWTC's Construction Work Plan
- Other SWTC documents
- On-site inspections of major SWTC transmission assets
- The experience of Burns & McDonnell's transmission engineers
- Interviews with SWTC staff
- The experience of Burns & McDonnell with other utilities
- The 2007 Useful Life Study developed by Burns & McDonnell
- The 2008 Useful Life Study Update developed by Burns & McDonnell

Burns & McDonnell's approach to meeting the requirements for the Study was based, in part, on the physical site observations of several of SWTC's transmission facilities and the experience of Burns & McDonnell's transmission system engineers. The activities performed during the site visits at selected facilities included:

- Development of facilities descriptions
- Observation of transmission equipment and facilities
- Evaluation of equipment and facilities condition
- Interviews of operating and maintenance staff



- Reviews of organization structure, procedures, and staffing levels
- Determination of facility operating and maintenance practices
- Collection of pertinent equipment and operating information

Based on the above factors, useful lives for each account were determined and benchmarked against the normal life expectancies and industry standards for substation and transmission line assets. The estimated useful life and the remaining useful life for each account are shown in Table ES-1. Burns & McDonnell observed that SWTC follows a comprehensive replacement program where individual components are repaired or replaced when they reach a certain age or become damaged. Burns & McDonnell recommends that SWTC continue to follow a comprehensive maintenance program where individual components should be either repaired or replaced as damage is identified.

## **DEPRECIATION RATE ANALYSIS**

The Study was conducted to analyze the service life characteristics, net salvage indications, and depreciation reserve status based on historical data from SWTC's accounting records, and then to derive appropriate depreciation rates for SWTC's transmission system. Actuarial analyses were performed using SWTC's historical data and applied to individual accounts to estimate useful service lives and net salvage rates.

Two primary methods were used to calculate depreciation accruals: the Whole Life method (Account 353 –Station Equipment, Account 355-Poles, Account 356 –Lines and Conductors), and the Life Span method combined with the Remaining Life technique (Account 352 – Structures and Account 354 –Towers).

SWTC did not have removal cost and net salvage data available in order to assess whether specific detailed estimates of terminal removal costs and net salvage values for the SWTC transmission assets could be developed with reasonable substantiation. Therefore, industry standards and the past experience of Burns & McDonnell with other utilities were considered in the projected net salvage values.

Table ES-1 shows each transmission account balance and reserve balance as of December 31, 2011. Table ES-1 also summarizes the results of the depreciation rate analysis by showing the existing depreciation rates and existing annual depreciation expense compared to the proposed depreciation rates and proposed annual depreciation expense. Detailed calculations for the proposed depreciation rates are provided in Appendix A.

Annual depreciation expense based on applying the **existing** depreciation rates to the December 31, 2011 balances in each account totaled \$4.18 million. The application of the **proposed** depreciation rates to the same December 31, 2011 account balances resulted in estimated annual depreciation expense of approximately \$2.84 million, representing an estimated decrease in SWTC's total annual depreciation expense approximately \$1.35 million or 32 percent.



A physical observation of Butterfield was made on April 18, 2012. The substation appears to be in good working condition. There is no oil insulated equipment at Butterfield.

### **Kartchner Substation**

The Kartchner substation was installed in 1974 and is located in the southern portion of SWTC's territory close to San Rafael. Kartchner has:

- a 115 kV line coming in from Pantano,
- four 69 kV lines going out owned by SSVEC,
- one 115 kV transformer,
- one 115 kV circuit breaker,
- two 69 kV capacitor banks,
- seven 69 kV circuit breakers (four oil, three gas).

A control building located within the substation contains all of the electrical controls associated with the transformer, capacitor banks and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

A physical observation of Kartchner was made on April 18, 2012. The substation appears to be in good working condition. There were no signs of current or past oil leaks from any of the oil insulated equipment.

### **New Tucson Substation**

The New Tucson substation was installed in 2011 and is located in the central portion of SWTC's territory between Sahuarita and Pantano. New Tucson contains:

- a 230 kV line coming in from Sahuarita,
- a 230 kV line going out to Pantano,
- 25 kV feeders going out that are owned by TRICO,
- a 230 kV transformer,
- three 230 kV circuit breakers,
- a 25 kV breaker owned by TRICO.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

A physical observation of New Tucson was made on April 19, 2012. The new substation appears to be in good working condition. There is no oil insulated equipment at New Tucson.

### **Oracle Junction Substation**

The Oracle Junction substation was installed in 1990 and is located in the west-central portion of SWTC's territory by Saddlebrooke Ranch. Oracle Junction is partially owned by the San Carlos Irrigation Project (SCIP) and has:

- a 115 kV line owned by SCIP,
- a 69 kV line owned by SCIP,
- a 69 kV line going out owned by TRICO,
- two 115 kV transformers,
- one 69 kV transformer,
- six 69 kV circuit breakers.

A control building located within the substation contains all of the electrical controls associated with both the transformers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

A physical observation of Oracle was made on April 19, 2012. The substation appears to be in good working condition. There is no oil insulated equipment at Oracle Junction.

### **Pantano Substation**

Pantano is a small substation that was installed in 1974 and is located in the central portion of SWTC's territory. Pantano has:

- a 230 kV line coming in from New Tucson,

- a 230 kV line going out to Butterfield,
- a 115 kV line going out to Kartchner,
- a 230 kV transformer,
- two 230 kV circuit breakers,
- one 230 kV circuit switcher,
- two 115 kV circuit breakers (both oil).

A control building located within the substation contains all of the electrical controls associated with the transformer, circuit switcher and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformer and the associated transmission lines that enter and exit the substation.

A physical observation of Pantano was made on April 19, 2012. The substation appears to be in good working condition. There were no signs of current or past oil leaks from any of the oil insulated equipment.

### **Saddlebrooke Ranch Substation**

The Saddlebrooke Ranch substation was installed in 2007 and is located on the north-central portion of SWTC's territory close to Oracle. Saddlebrooke Ranch has:

- a 115 kV line coming in from Oracle owned by APS,
- another 115 kV line going out to San Manuel owned by APS,
- 25 kV feeders going out owned by TRICO,
- one 115 kV transformer,
- three 115 kV circuit breakers,
- a 25 kV circuit breaker owned by TRICO.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for the substation transformer, breakers and the associated transmission lines that enter and exit the substation.

A physical observation of Saddlebrooke Ranch was made on April 19, 2012. The substation appears to be in good working condition. There was no oil insulated equipment at Saddlebrooke Ranch.

### **Sahuarita Substation**

Sahuarita is a small substation that was installed in 1999 and is located in the central portion of SWTC's territory. Sahuarita has:

- a 230 kV line coming in from Bicknell,
- a 230 kV line going out to New Tucson,
- 25 kV feeders going out that are owned by TRICO,
- three 230 kV circuit breakers,
- a 230 kV transformer.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

A physical observation of Sahuarita was made on April 19, 2012. The substation appears to be in good working condition. There was no oil insulated equipment at this substation.

### **San Rafael Substation**

San Rafael is a small substation that was installed in 1989 and is located in the southern portion of SWTC's territory. San Rafael has:

- a 230 kV line going out to Butterfield,
- three 69 kV lines going out that are owned by SSVEC,
- a 230 kV transformer,
- a 230 kV circuit breaker,
- five 69 kV transformers (all oil).

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformer and the associated transmission lines that enter and exit the substation.

A physical observation of San Rafael was made on April 18, 2012. The substation appears to be in good working condition. There were no signs of current or past oil leaks from any of the oil insulated equipment.

### **Sandario Substation**

The Sandario substation was installed in 2006 and is located in the west-central portion of SWTC's territory between Avra Valley and Three Points. Sandario has:

- a 115 kV line coming in from Avra Valley,
- a 115 kV line going out to Three Points,
- 25 kV feeders going out owned by TRICO,
- a 115 kV transformer,
- five 115 kV circuit breakers,
- two 115 kV capacitor banks.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for the substation transformer, breakers, capacitor banks and the associated transmission lines that enter and exit the substation.

A physical observation of Sandario was made on April 19, 2012. The substation appears to be in good working condition. There was no oil insulated equipment at Sandario.

### **Thornydale Substation**

The Thornydale substation is a small substation that was installed in 2001 and is located in the north-central portion of SWTC's territory. Thornydale has:



- a 46 kV line coming in owned by Tucson Electric Power (TEP),
- 25 kV feeders going out owned by TRICO,
- a 46 kV transformer,
- a 46 kV circuit breaker.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformer and the associated transmission lines that enter and exit the substation.

A physical observation of Thornydale was made on April 19, 2012. The substation appears to be in good working condition. There was no oil insulated equipment at Thornydale.

### **Three Points Substation**

The Three Points 115 kV substation was installed in 1972 and is located in the western portion of SWTC's territory. Three Points has:

- a 115 kV line connected to Sandario,
- a 115 KV line going out to Valencia,
- a 115 kV line going out to Bicknell,
- 25 kV feeders going out owned by TRICO,
- a 115 kV transformer,
- four 115 kV circuit breakers,
- a 115 kV circuit switcher,
- a 115 kV capacitor bank.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformer and the associated transmission lines that enter and exit the substation.

A physical observation of Three Points was made on April 19, 2012. The substation appears to be in good working condition. There was no oil insulated equipment at Three Points.

**Vail Substation**

The Vail substation is part of the Vail–Westwing transmission system owned by TEP and was originally put in-service in 1976. It is located in the central portion of SWTC's territory. At Vail SWTC owns:

- a 345 kV line going into Vail from Bicknell,
- one and a half 345 kV circuit breakers,
- a 24 percent interest in another 345 kV line and 345 kV circuit breaker.

A physical observation of Vail was made on April 19, 2012 around the perimeter of the substation. The substation appears to be in good working condition. There was no oil insulated equipment at Vail.

**Valencia Substation**

The Valencia substation was installed in 1994 and is located in the west-central portion of SWTC's territory. Valencia has:

- a 115 kV line coming in from Three Points,
- 25 kV feeders going out owned by TRICO,
- two 115 kV transformers,
- one 115 kV circuit breaker,
- one 115 kV circuit switcher,
- one 25 kV circuit breaker.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

A physical observation of Valencia was made on April 19, 2012. The substation appears to be in good working condition. There was no oil insulated equipment at Valencia.

### **Winchester Substation**

The Winchester substation was installed in 2004 and is located in the north-central portion of SWTC's territory next to a 345 kV substation owned by TEP. Winchester has:

- a 345 kV line owned by TEP,
- a 230 kV line coming in from Apache,
- a 345 kV transformer,
- a 230 kV circuit breaker.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformer and the associated transmission lines that enter and exit the substation.

A physical observation of Winchester was made on April 18, 2012. The substation appears to be in good working condition. There was no oil insulated equipment at Winchester.

### **OTHER TRANSMISSION SYSTEM ASSETS**

This section of the Study provides an engineering assessment of SWTC's other transmission system assets including the poles, lines, and towers physically inspected by Burns & McDonnell. SWTC has approximately 1,800 miles of transmission lines located throughout southern and west central Arizona. It would be time prohibitive to physically inspect all of the other SWTC transmission system assets, so it was the objective of Burns & McDonnell to select a representative sample of SWTC transmission lines, poles, and towers to inspect. The following SWTC transmission system lines, poles, and towers located in the vicinity of Benson and Tucson, Arizona were physically inspected by Burns & McDonnell.

#### Other Transmission System Assets

Apache to Winchester 345 kV Line, Poles, and Towers  
Vail to Bicknell 345 kV Line, Poles, and Towers  
Pantano to Kartchner 115 kV Line, Poles, and Towers  
San Rafael to Butterfield 230 kV Line, Poles, and Towers  
Butterfield to Pantano 230 kV Line, Poles, and Towers  
Thornycroft Line, Poles, and Towers  
Sandario 115 kV Line, Poles, and Towers

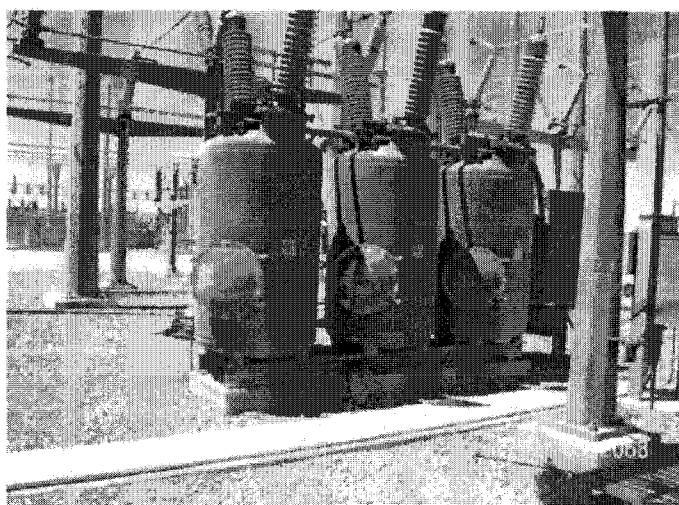
On April 18 and 19, 2012, Mr. Ted Kelly and Mr. Jon Summerville of Burns & McDonnell met with representatives of SWTC to discuss the condition, operations, and maintenance of SWTC's other transmission system assets. Mr. Ron Knutson and Mr. Keith Jacobs of SWTC were the individuals with whom Burns & McDonnell conducted transmission system inspections and discussed the transmission system's condition and operation and maintenance.

During the inspections, Burns & McDonnell first verified that the other transmission system assets were currently in service at the respective substation. Burns & McDonnell then visually assessed the condition of the lines, towers, and poles around each substation that was inspected. In general, SWTC's transmission system assets were in excellent condition, being replaced as needed, maintained at a high level and had low levels of stress as compared to similar assets in other electric utility transmission systems.

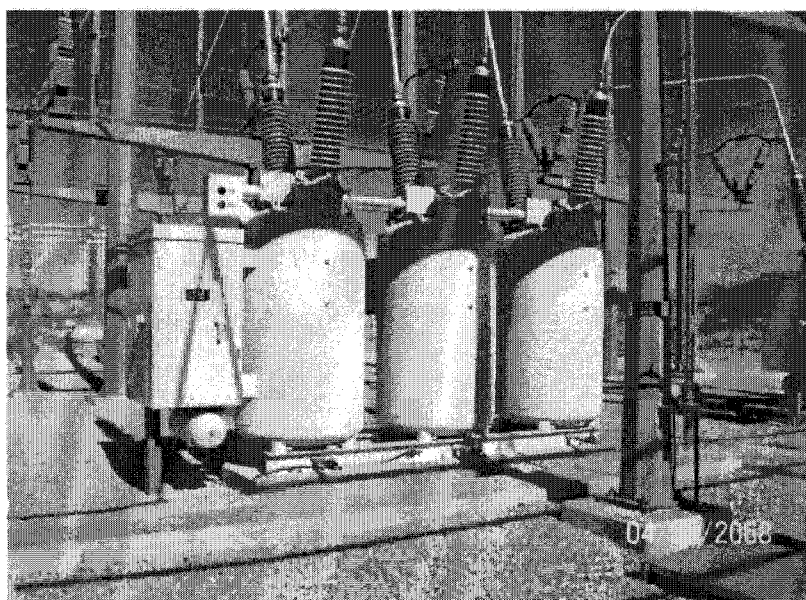
#### **OPERATIONS & MAINTENANCE**

Based on all observations of the transmission substations and other transmission system assets, maintenance of the transmission system appears to have been performed on a regular basis. Observations from the site inspections are described below and pictures provided where applicable.

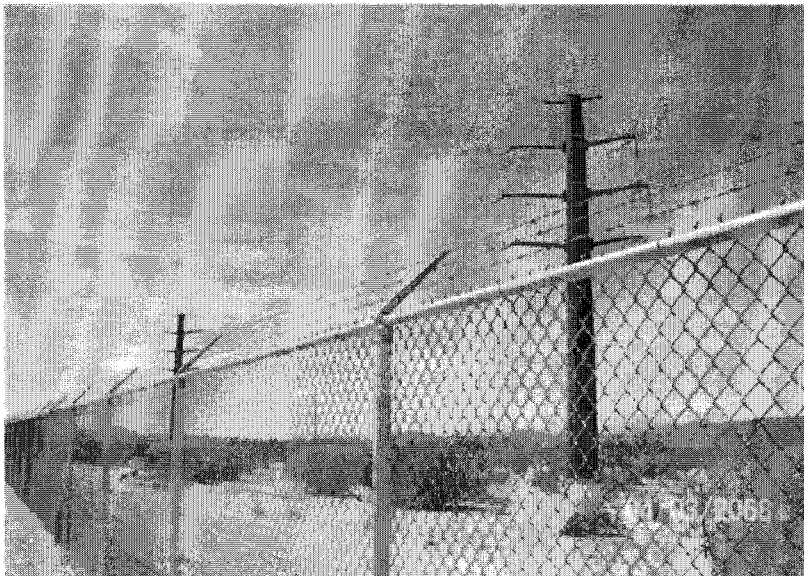
Some 115 kV and higher oil circuit breakers have been replaced and the remaining oil circuit breakers continue to have regular maintenance and are in good working order. SWTC is currently replacing all of its 115 kV and higher oil circuit breakers. These oil circuit breakers at Apache are scheduled to be replaced soon.



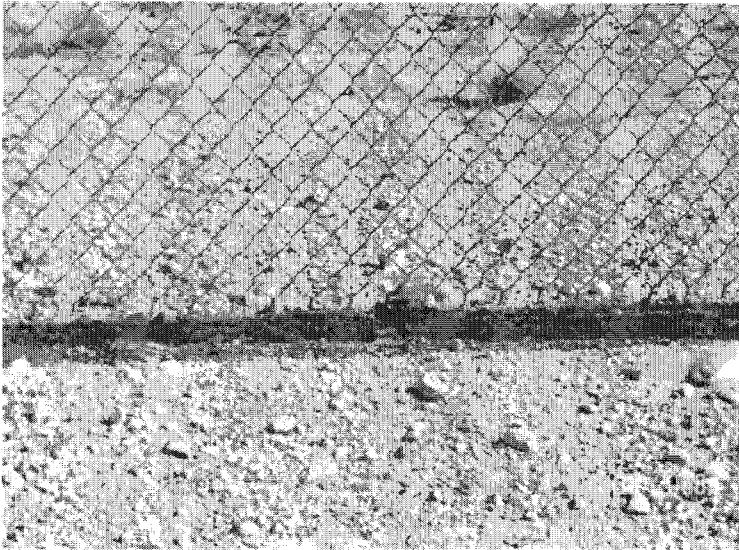
Of the remaining oil circuit breakers, no signs of leaking oil or leaked oil were visible, as shown below for these oil circuit breakers at Bicknell.



All the fencing at each substation was complete and in very good condition, as shown here at Pantano and Bicknell.



Most substation fencing had no gaps between the fence and ground. Although there is a small gap between the ground and fencing shown below, it was rare and in all instances fell within the industry's four inch guideline.

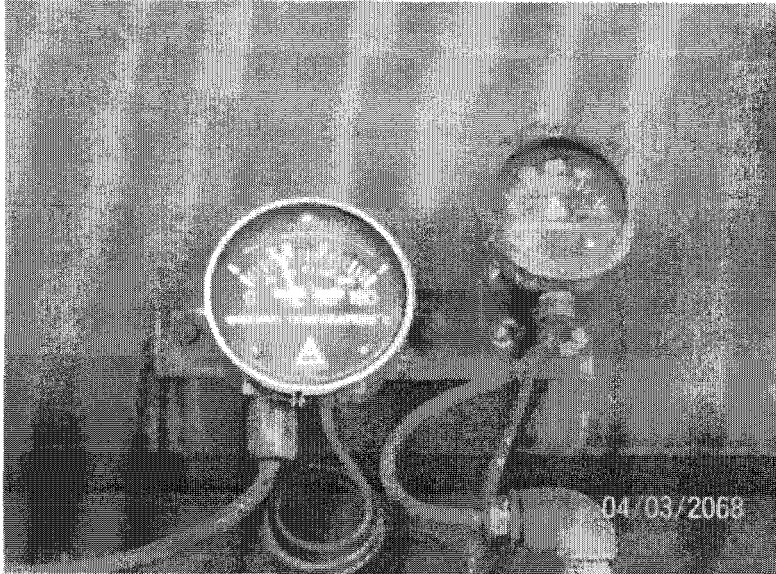


A new gas analyzer employing the latest technology was recently installed at Apache as shown below. New gas analyzers have been installed at the oldest and most critical SWTC transformers.

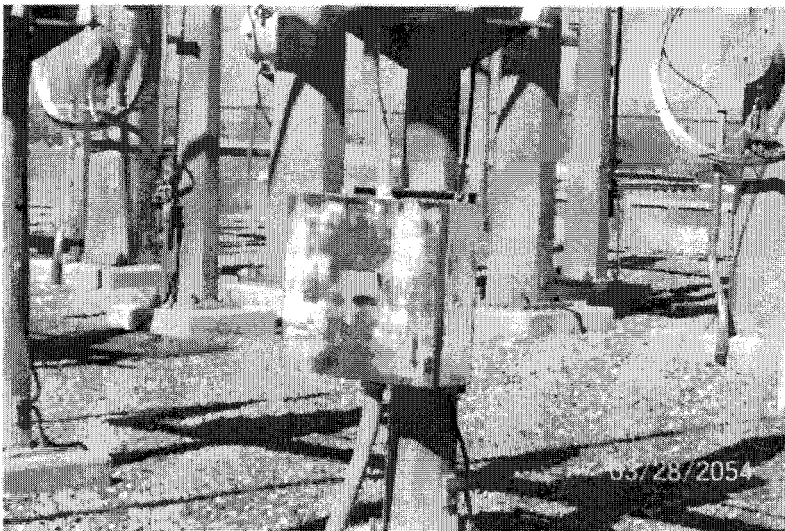




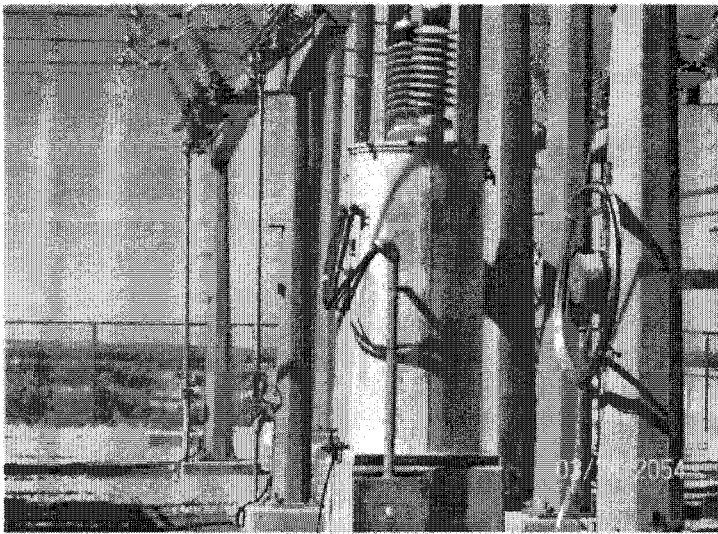
The liquid temperature meter on this transformer at Apache shows that a somewhat high temperature was reached, but that SWTC quickly resolved the issue and the liquid temperature is well within a normal range now.



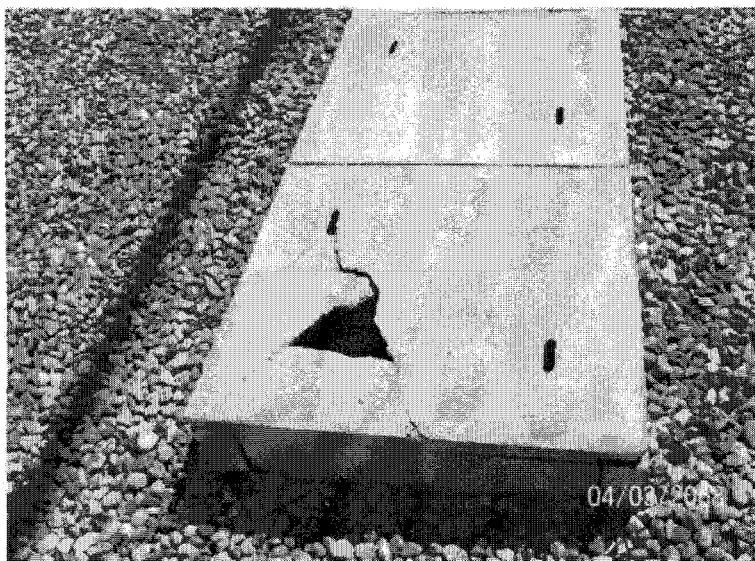
A very small amount of surface rust was found as shown below, but overall, the vast majority of equipment is being well maintained and replaced when needed.







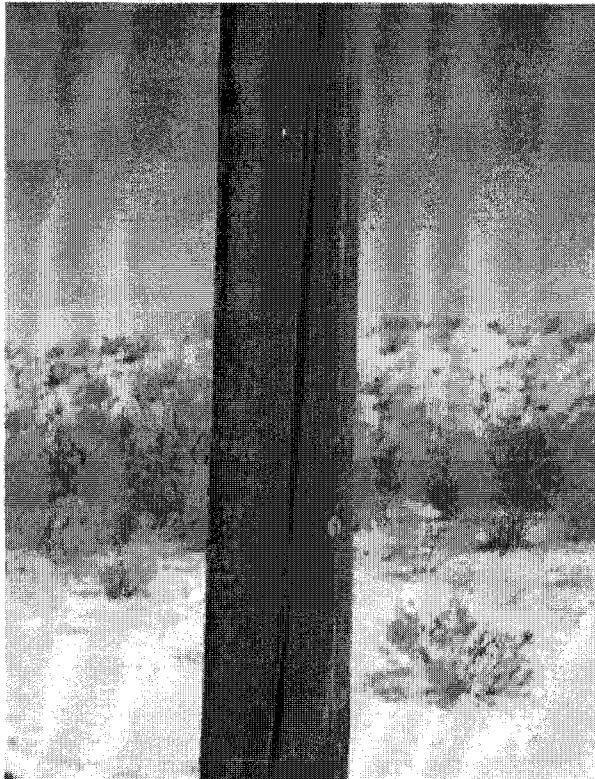
A walkway tile at Kartchner had cracked and was broken and is being replaced.



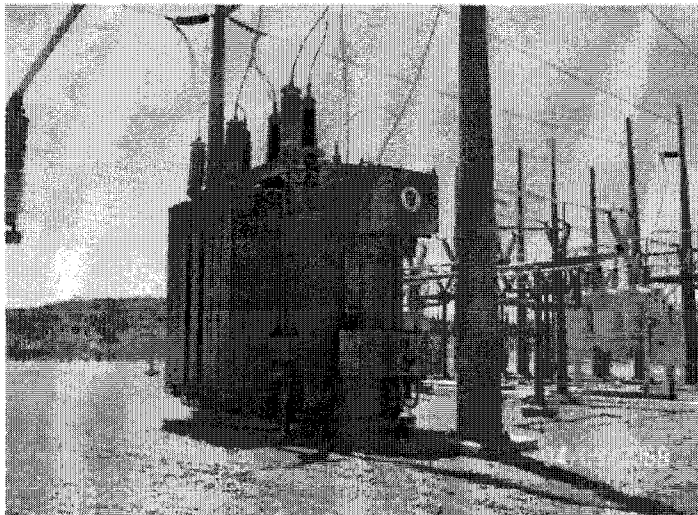
At Bicknell the third winding temperature meter from the top appeared to be not operating. SWTC is investigating whether this meter needs to be replaced or is merely not used any more.



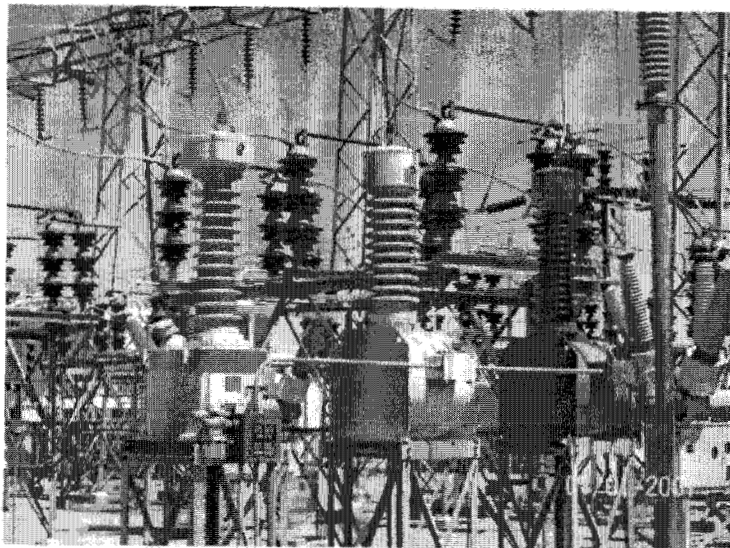
Part of the proper maintenance of any transmission system involves replacing older equipment when necessary and SWTC replaces wood poles with steel poles when needed. For example, all the older wood poles on this 115 kV line from Apache to Hayden are currently being replaced.



This older oil transformer at Bicknell will be replaced soon.

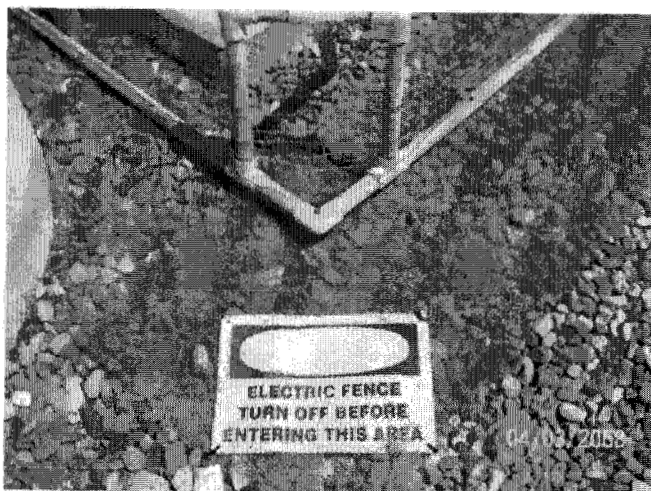


This older circuit breaker at Apache will also be replaced soon.



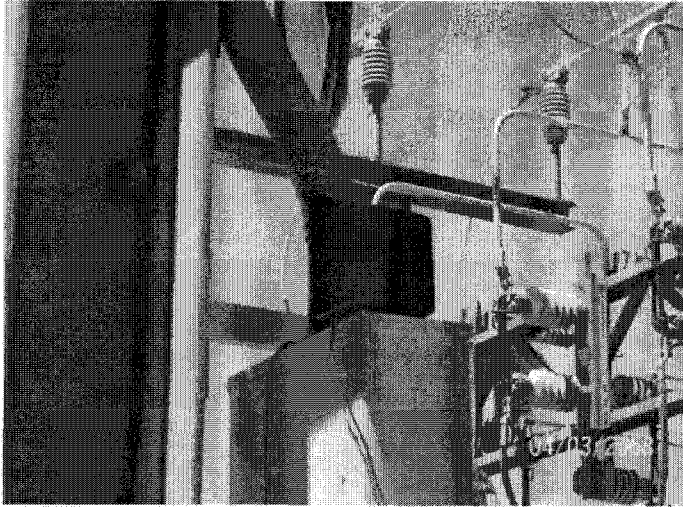
Two major aspects of transmission system maintenance often overlooked by electric utilities involve safety and security. Many transmission system failures and outages are the result of inadequate security or unsafe conditions. SWTC's substation gate security was very good. Transmission system dispatchers were called before and after every substation inspection and gate locks were secured at every substation. SWTC employs many safety and security features when needed not found in other transmission systems, such as:

- Snake intrusion prevention at Valencia





- Bird noise at Three Points to scare off Raptors



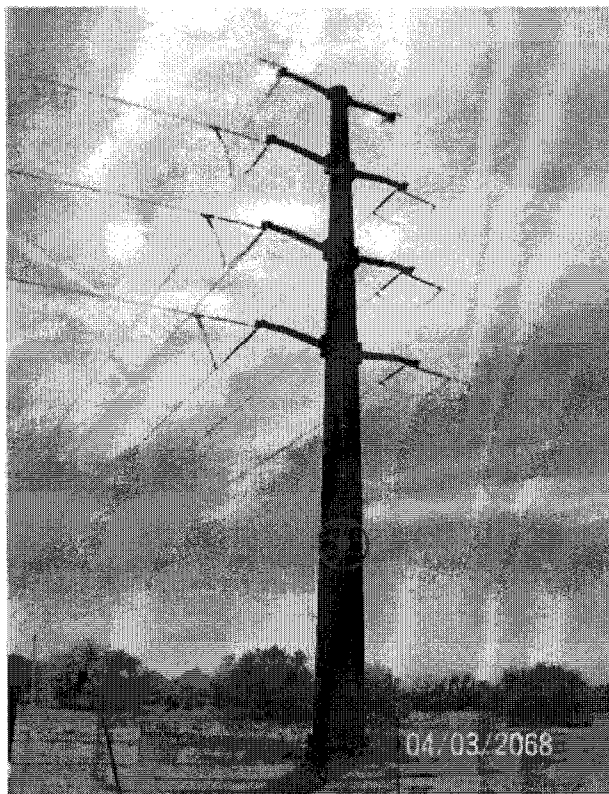
- Animal intrusion prevention at Avra Valley



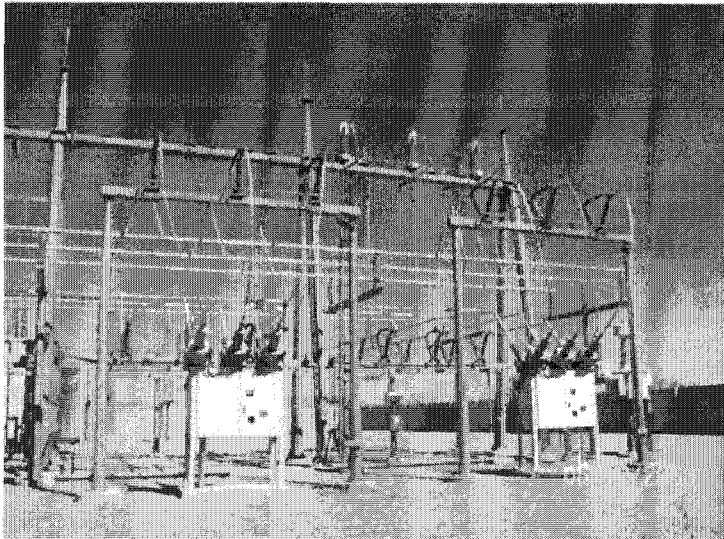
- New transmission locks on all station equipment and cabinets



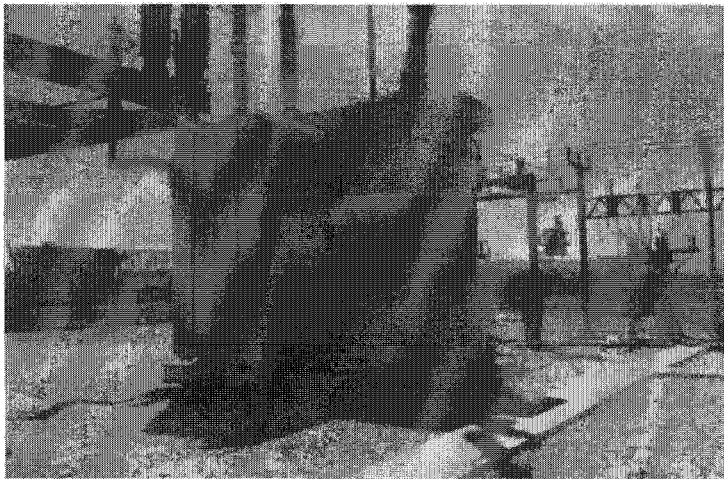
- Substations had many warning signs



- Good fencing (as described above)
- Actual walls surrounding the substation when needed



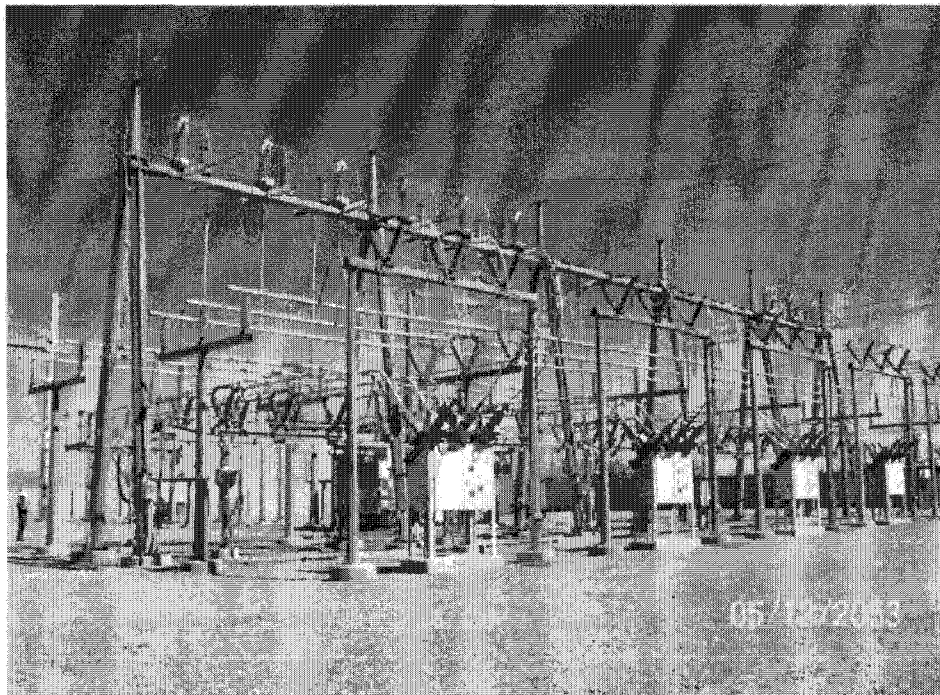
- Roped off work areas



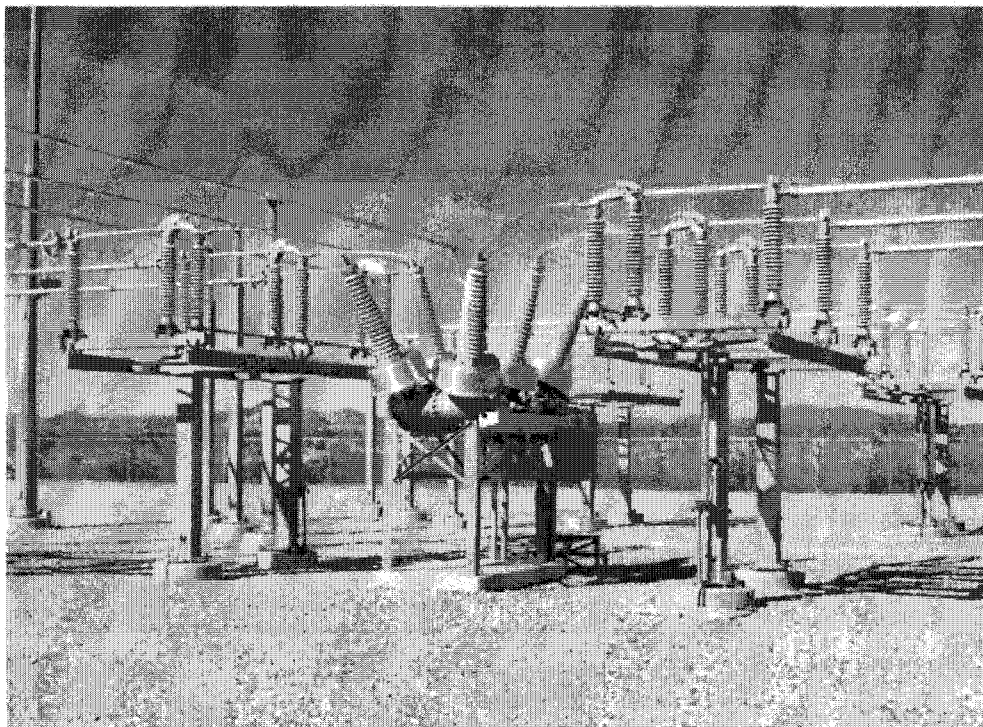
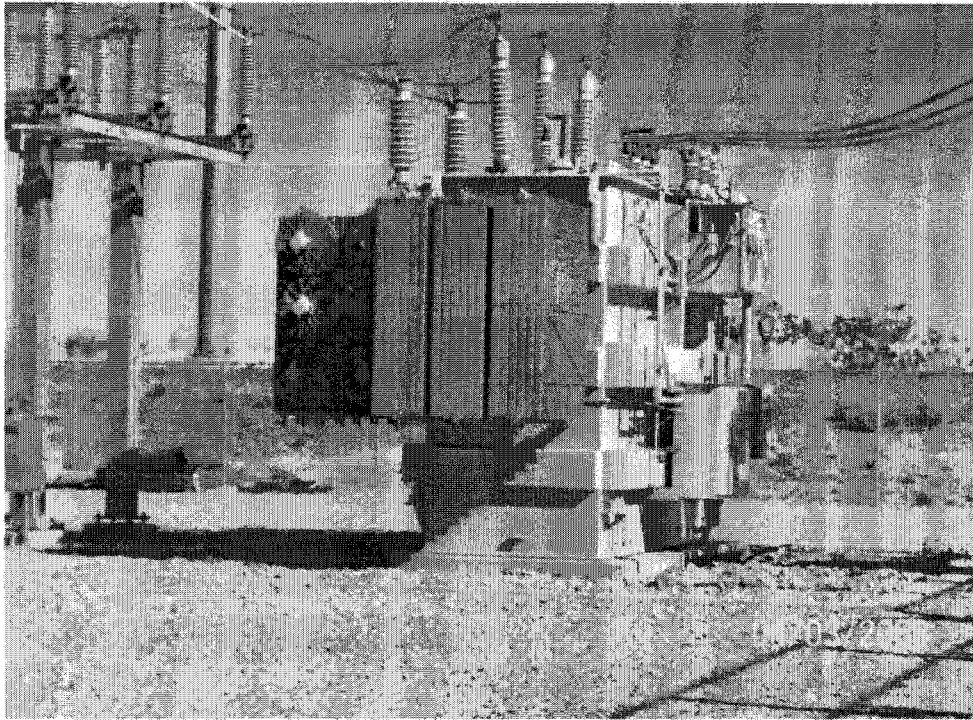
- Hardhats were worn inside substations

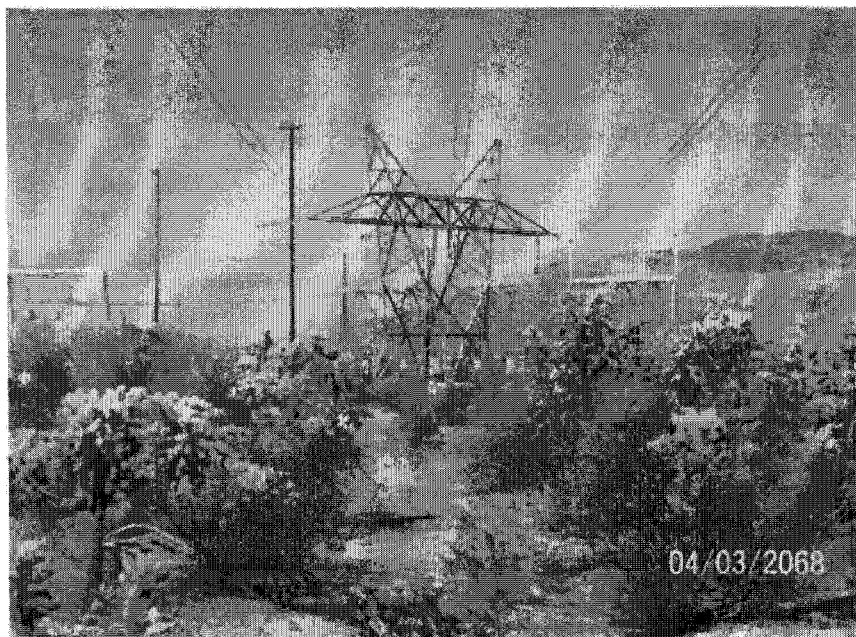
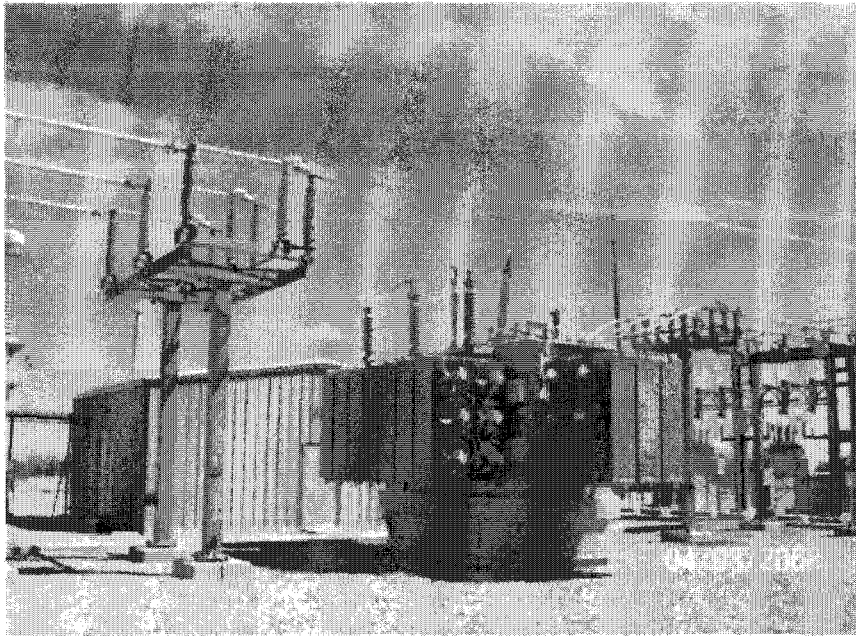


Although a few minor issues were identified, overall, the inspections showed SWTC's transmission system to be very well maintained. In substations that SWTC shares transmission system equipment with other electric utilities, the equipment and area maintained by SWTC was always better maintained. The following pictures are typical of the conditions found at each substation.









### USEFUL SERVICE LIFE

Estimated useful lives for SWTC's transmission system assets were based primarily on national industry standards regarding the expected useful life of major electric transmission system equipment, SWTC's operating and maintenance records, Burns & McDonnell's experience with

other utilities, the climate in Arizona, and physical site inspections of SWTC's transmission system. The estimated useful lives for each transmission system account are shown below and include two additional years from what would be typical in other parts of the country due to the very dry climate in Arizona which leads to less corrosion over time.

TRANSMISSION PLANT		USEFUL LIFE (years)
35200	Structures & Improvement	57
35300	Station Equipment	55
35400	Towers & Fixtures	60
35500	Poles & Fixtures	52
35600	Overhead Conductors	55
35900	Roads and Trails	57

Burns & McDonnell recommends that SWTC continue to follow a comprehensive program of testing on all major equipment approaching the manufacturer service limits and other critical equipment. Individual components should be either repaired or replaced as damage is identified. Certain tests should continue to be performed on an annual basis, such as analysis of oil samples retrieved from transformers. Other tests, such as thermal imaging of electrical connections, can be done less frequently.

Electrical insulation is subject to loss of dielectric capability, particularly when subjected to heat. Testing programs are generally able to determine the capability of the components, so replacement or repairs can be initiated before the component affects availability. These programs should be implemented and the frequency increased as the equipment ages. Several of the SWTC transmission substations are approaching the age when an electrical insulation testing program should be performed. Assuming the testing recommended is conducted and assuming any damaged components are either repaired or replaced, there would be no reason, from an electrical engineering perspective, that all of SWTC's transmission substations cannot remain in service as long as they are economically viable to operate.

\* \* \* \* \*

**PART III – DEPRECIATION RATE ANALYSIS**

### **PART III**

## **DEPRECIATION RATE ANALYSIS**

Part III of this Study describes the methodology and presents the results of the analysis performed in the formulation of proposed new depreciation rates for the transmission system assets of SWTC. The depreciation rate analysis was performed based on the historical accounting records of SWTC as of December 31, 2011. The methodologies and basis for completing this Study are similar to the processes utilized in completing similar depreciation rate studies approved by RUS.

### **STUDY SCOPE & PURPOSE**

This depreciation rate analysis was conducted to analyze the service life characteristics, net salvage indications, and depreciation reserve status based on historical data from SWTC's accounting records, and then to derive appropriate depreciation rates for SWTC's transmission system accounts.

The procedures used to analyze SWTC's historical data pertaining to useful service lives and net salvage rates are discussed for the assets represented by each transmission system account. This narrative description of the depreciation rate analysis completed for SWTC includes a variety of concepts related to common utility depreciation terminology and study techniques. Various reference materials are readily available that provide thorough explanations of these concepts.<sup>1</sup>

There was no historical salvage and removal cost accounting data in SWTC's accounting system for which to perform statistically valid actuarial studies so engineering estimates were made based on industry standards and the historical data from similar utilities. This data, combined with the engineering judgment of the depreciation consultants, was relied upon in the completion of the analysis. In addition, consideration to extending useful lives was given based on an engineering assessment of proper maintenance, operation and replacements combined with the dry climate in Arizona.

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<sup>1</sup> For further information, refer to industry publications "Public Utility Depreciation Practices", National Association of Regulatory Utility Commissioners (NARUC), August 1996 and "Depreciation Systems", Wolf, Frank and Fitch, Chester, Iowa State University Press, 1994.

## DEPRECIATION RATE STUDY METHODS

Two primary methods were used to calculate depreciation accruals: the Whole Life method (Account 353 –Station Equipment, Account 355-Poles, Account 356 –Conductors), and the Life Span method combined with the Remaining Life technique (Account 352 –Structures and Account 354 –Towers).

### Whole Life Method

For each account where used, the Whole Life method uses the account average service life (ASL) and the average net salvage percentage (NS) for the account to calculate the annual depreciation rate according to the following formula:

$$\frac{1 - NS}{ASL}$$

Whole life depreciation rates are appropriate for mass property type of accounts where there are a large number of property units with no definite or planned final retirement, retirements of individual units are independent of each other, and additions are generally independent of existing units. Typical property falling in this category includes control panels, switches, circuits, and relays.

Estimates of average service life and dispersion were studied using the retirement rate method of actuarial analysis based upon the historical nature of the characteristics of the assets retired from each account since inception. Accounts for which insufficient retirement activity had occurred on which to conduct actuarial analysis, or the results of such an analysis were inconclusive, other publicly available industry information and the engineering judgment of the depreciation consultant were relied upon to estimate reasonable average service lives and/or average net salvage values.

### Life Span Method

The Life Span method calculates lives for an asset group or account based on the assumption that all property units in the group will retire at approximately the same time, whether the units are part of the initial installation or later additions. Typical property falling in this category includes transmission towers, facilities and buildings.



During the life of a transmission system, portions of the system are retired and replaced. These items typically include poles, circuit breakers and switches. Because not all assets live the entire length of time a transmission system remains in service, these so-called interim retirements tend to decrease the life of the dollars in the group or account. Therefore, it is important in a depreciation study to analyze the historical interim retirement amounts and whether the interim retirement rates are expected to continue at the same pace over the remaining life of the unit. Interim retirements can be studied mathematically using the system of Iowa curves, the Gompertz-Makeham formula, or derived interim retirement rate curves. As the information was readily available, interim retirement life tables were developed separately for each of the accounts under the Life Span method.

Although detailed interim retirement records are maintained for each building and transmission facility, interim retirements for most locations are relatively few and little applicable life knowledge would be derived from attempting an analysis on such a small data set. Therefore, to improve the validity of the interim retirement rate analysis, an interim retirement rate calculation was performed for each account as a whole, rather than by account and then by location.

Burns & McDonnell assessed the SWTC transmission system regarding its design, performance, operation and maintenance, and condition, and provided estimates of the useful life for each transmission account to the depreciation consultant as input to the depreciation model. The Engineering Assessment of the major system facilities are detailed in Part II of the Study. For each transmission account, an average year of final retirement (AYFR) was calculated based on the estimated useful life and weighted average in-service dates of the transmission assets. This AYFR and the aforementioned interim retirement rates are inputs to the remaining life (RL) calculation for each account.

The Remaining Life depreciation rate automatically adjusts for past under- and over-accruals by building those amounts into the depreciation rate calculation using the reserve ratio (RR). The RR is the depreciation reserve amount divided by the account balance at the point in time of the study, (December 31, 2011 for this study). The net salvage parameter in the Remaining Life rate

equation is the future net salvage rate (FS). The Remaining Life depreciation rate is expressed mathematically as:

$$\frac{1 - FS - RR}{\text{Remaining Life}}$$

### **Sources of Industry Information**

Actuarial methods are most accurate and applicable to determination of historic trends for assessing average service lives and salvage specific to an account when there is significant annual turnover of assets in that account. However, the limited activity in several accounts prevented actuarial analysis.

Accounts for which insufficient retirement activity had occurred on which to conduct actuarial analysis, or for which the results of such an analysis were inconclusive, other publicly available industry information, the Engineer's Assessment in Section II and the engineering judgment of the depreciation consultant were relied upon to estimate reasonable average service lives. Three engineering publications that provide electric industry information were also considered as a resource for making certain assumptions or for the evaluation of lifespan and salvage value parameters:

1. "Depreciation Statistics from 100 Large United States Electric Utilities – FERC Jurisdiction", Society of Depreciation Professionals Journal, Mougin, Clarence, 1992. (hereinafter "SDP report").
2. "A Survey of Depreciation Statistics", Edison Electric Institute, Robinson, Earl, 1995. (hereinafter "EEI report").

### **Net Salvage Value Analysis**

SWTC could not provide any historical accounting data for salvage values or removal costs. As such, Burns & McDonnell's engineers and depreciation consultants performed analysis of



available industry data and information provided by other electric utilities in order to determine net salvage value estimates.

The net salvage figures used in the depreciation rate formula for transmission accounts are for final net salvage, i.e. the gross proceeds realized less any removal cost to raze the structures represented in the account, if any. The net salvage values in the depreciation study were developed exclusive of any engineering estimates of potential legal asset retirement obligations for substantial environmental remediation based upon future, unknown environmental regulatory requirements.

### **DEPRECIATION RATE ANALYSIS**

Table III-1 summarizes the results of the depreciation rate analysis by showing the existing depreciation rates and annual depreciation expense compared to the proposed depreciation rates and annual depreciation expense. Table III-1 also shows the year-end account balances, reserve ratios, average service lives, remaining service lives and net salvage factors.



The annual depreciation expense calculated in Table III-1 based on the application of the **existing depreciation rates** to the December 31, 2011 transmission account balances is approximately \$4.18 million. The application of the **proposed depreciation rates** to the December 31, 2011 transmission account balances resulted in calculated total annual depreciation expense of approximately \$2.84 million, representing an estimated decrease in SWTC's total annual depreciation expense of approximately \$1.35 million. Detailed calculations for all the accounts shown in Table III-1 are provided in Appendix A.

\* \* \* \* \*

**PART IV – SUMMARY & CONCLUSIONS**

## PART IV

### SUMMARY & CONCLUSIONS

Burns & McDonnell has completed its assessment and analysis of the remaining useful lives and the depreciation rates pertaining to the transmission assets of SWTC as reflected in this Comprehensive Depreciation Study. The Study was prepared in accordance with, and satisfies the requirements of, RUS as issued to SWTC subsequent to its last depreciation study.

The proposed depreciation rates have been developed for SWTC's transmission system assets based on historical accounting records provided by SWTC's accounting system, other published depreciation survey information, and generally-accepted depreciation analysis methodologies. Based on the analysis of the information provided by SWTC and the results of the on-site observations of the SWTC transmission and transmission facilities, Burns & McDonnell has formulated estimates of the remaining useful service lives for each account.

Table III-1 presented the proposed remaining life estimates and the corresponding proposed depreciation rates for each transmission account balance of SWTC's transmission system in service as of December 31, 2011. Table III-1 also provided comparison calculations of SWTC's annual depreciation expense, calculated using the existing depreciation rates and the proposed depreciation rates. That comparison showed that the proposed depreciation rates, if implemented by SWTC, would result in an estimated decrease in depreciation expense of approximately \$1.35 million per year based on December 31, 2011 account balances.

Assuming that the recommended equipment testing on the transmission system is conducted and assuming that any damaged components of the equipment are either repaired or replaced, Burns & McDonnell finds that from a mechanical engineering perspective, all of SWTC's generating units could remain in reliable operating service well into the future. This conclusion is conditioned by the limiting conditions previously identified.

Therefore, Burns & McDonnell recommends to SWTC that it consider pursuing approval and implementation of the proposed depreciation rates for each RUS transmission account as

presented in this report. These proposed depreciation rates are projected to decrease total annual depreciation expenses of SWTC by approximately 32 percent.

In the preparation of this report, the information provided by SWTC was used by Burns & McDonnell to make certain assumptions with respect to conditions that may exist in the future. Burns & McDonnell believes the assumptions made are reasonable for the purposes of this report and makes no representation that the conditions assumed will, in fact, occur. In addition, while Burns & McDonnell has no reason to believe that the information provided by SWTC, and on which was relied upon, is inaccurate in any material respect, it has not been independently verified and its accuracy or completeness cannot be guaranteed. To the extent that actual future conditions differ from those assumed herein or from the information provided, actual results may vary from those projected.

\* \* \* \* \*

**APPENDIX A**

# Southwest Transmission Cooperative 2010 Depreciation Rate Study - Interim Retirement Rate Analysis



Transmission Plant Account: 35200  
Date of Retirement (Mid Year): 2064  
Interim Retirement Rate: 0.00091  
Study Date, Year-End: 2012  
Future Life from Study Date: 52.4  
Remaining Life (F/E - .5) = 34.9

Development of Interim Retirement Rate					
Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1952				\$ -	0.00000
1953				\$ -	0.00000
1954				\$ -	0.00000
1955				\$ -	0.00000
1956				\$ -	0.00000
1957				\$ -	0.00000
1958				\$ -	0.00000
1959				\$ -	0.00000
1960				\$ -	0.00000
1961				\$ -	0.00000
1962				\$ -	0.00000
1963				\$ -	0.00000
1964				\$ -	0.00000
1965				\$ -	0.00000
1966				\$ -	0.00000
1967				\$ -	0.00000
1968				\$ -	0.00000
1969				\$ -	0.00000
1970				\$ -	0.00000
1971				\$ -	0.00000
1972	\$2,329			\$ 2,329	0.00000
1973	\$11,740			\$ 14,069	0.00000
1974	\$48,623			\$ 62,992	0.00000
1975	\$130,119	(\$11,269)		\$ 181,842	0.06197
1976	\$141,662			\$ 323,408	0.00000
1977	\$26,920	(\$11,609)		\$ 347,771	0.00736
1978	\$317,216			\$ 664,989	0.00000
1979	\$730,182			\$ 1,396,171	0.00000
1980	\$178,017			\$ 1,573,188	0.00000
1981				\$ 1,573,108	0.00000
1982	\$308,295	(\$1,803)		\$ 1,879,880	0.00085
1983				\$ 1,879,880	0.00000
1984				\$ 1,879,880	0.00000
1985	\$27,673			\$ 1,907,553	0.00000
1986	\$234,110			\$ 2,141,663	0.00000
1987				\$ 2,141,663	0.00000
1988		(\$47,956)		\$ 2,093,705	0.02291
1989				\$ 2,093,705	0.00000
1990	\$314,994			\$ 2,408,699	0.00000
1991	\$2,122			\$ 2,410,821	0.00000
1992				\$ 2,410,821	0.00000
1993				\$ 2,410,821	0.00000
1994	\$5,369			\$ 2,416,810	0.00000
1995				\$ 2,416,810	0.00000
1996				\$ 2,416,810	0.00000
1997				\$ 2,416,810	0.00000
1998				\$ 2,416,810	0.00000
1999				\$ 2,416,810	0.00000
2000				\$ 2,416,810	0.00000
2001				\$ 2,416,810	0.00000
2002	\$1,722,006			\$ 4,139,476	0.00000
2003				\$ 4,139,476	0.00000
2004	\$34,619			\$ 4,174,096	0.00000
2005	\$496,109			\$ 4,670,255	0.00000
2006	\$479,713			\$ 5,146,968	0.00000
2007				\$ 5,146,968	0.00000
2008				\$ 5,146,968	0.00000
2009		(\$27,324)		\$ 5,118,644	0.00534
2010	\$72,346			\$ 5,190,990	0.00000
2011	\$416,809			\$ 5,606,799	0.00000
TOTAL	\$5,662,004	\$ (90,712)		\$ 5,610,144	0.00091

2011 Adjment (\$39,487)

Interim Retirement Life Table					
Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (C-1) * C	E	F
2012	0.5	0.00091	0.99909	0.99954	34.41648
2011	1.5	0.00091	0.99909	0.99863	34.38514
2010	2.5	0.00091	0.99909	0.99772	34.35382
2009	3.5	0.00091	0.99909	0.99682	34.32254
2008	4.5	0.00091	0.99909	0.99591	34.29128
2007	5.5	0.00091	0.99909	0.99500	34.26006
2006	6.5	0.00091	0.99909	0.99410	34.22886
2005	7.5	0.00091	0.99909	0.99319	34.19769
2004	8.5	0.00091	0.99909	0.99229	34.16654
2003	9.5	0.00091	0.99909	0.99138	34.13543
2002	10.5	0.00091	0.99909	0.99048	34.10434
2001	11.5	0.00091	0.99909	0.98958	34.07328
2000	12.5	0.00091	0.99909	0.98868	34.04226
1999	13.5	0.00091	0.99909	0.98778	34.01126
1998	14.5	0.00091	0.99909	0.98688	33.98028
1997	15.5	0.00091	0.99909	0.98598	33.94934
1996	16.5	0.00091	0.99909	0.98508	33.91842
1995	17.5	0.00091	0.99909	0.98418	33.88753
1994	18.5	0.00091	0.99909	0.98329	33.85667
1993	19.5	0.00091	0.99909	0.98239	33.82584
1992	20.5	0.00091	0.99909	0.98150	33.79504
1991	21.5	0.00091	0.99909	0.98060	33.76426
1990	22.5	0.00091	0.99909	0.97971	33.73351
1989	23.5	0.00091	0.99909	0.97882	33.70279
1988	24.5	0.00091	0.99909	0.97793	33.67210
1987	25.5	0.00091	0.99909	0.97704	33.64146
1986	26.5	0.00091	0.99909	0.97615	33.61082
1985	27.5	0.00091	0.99909	0.97526	33.58026
1984	28.5	0.00091	0.99909	0.97437	33.54972
1983	29.5	0.00091	0.99909	0.97348	33.51918
1982	30.5	0.00091	0.99909	0.97259	33.48864
1981	31.5	0.00091	0.99909	0.97171	33.45811
1980	32.5	0.00091	0.99909	0.97082	33.42758
1979	33.5	0.00091	0.99909	0.96994	33.39704
1978	34.5	0.00091	0.99909	0.96906	33.36650
1977	35.5	0.00091	0.99909	0.96817	33.33596
1976	36.5	0.00091	0.99909	0.96729	33.30542
1975	37.5	0.00091	0.99909	0.96641	33.27488
1974	38.5	0.00091	0.99909	0.96553	33.24434
1973	39.5	0.00091	0.99909	0.96465	33.21380
1972	40.5	0.00091	0.99909	0.96377	33.18326
1971	41.5	0.00091	0.99909	0.96289	33.15272
1970	42.5	0.00091	0.99909	0.96201	33.12218
1969	43.5	0.00091	0.99909	0.96113	33.09164
1968	44.5	0.00091	0.99909	0.96025	33.06110
1967	45.5	0.00091	0.99909	0.95937	33.03056
1966	46.5	0.00091	0.99909	0.95849	33.00002
1965	47.5	0.00091	0.99909	0.95761	32.96948
1964	48.5	0.00091	0.99909	0.95673	32.93894
1963	49.5	0.00091	0.99909	0.95585	32.90840
1962	50.5	0.00091	0.99909	0.95497	32.87786
1961	51.5	0.00091	0.99909	0.95409	32.84732
1960	52.5	0.00091	0.99909	0.95321	32.81678
1959	53.5	0.00091	0.99909	0.95233	32.78624
1958	54.5	0.00091	0.99909	0.95145	32.75570
1957	55.5	0.00091	0.99909	0.95057	32.72516
1956	56.5	0.00091	0.99909	0.94969	32.69462
1955	57.5	0.00091	0.99909	0.94881	32.66408
1954	58.5	0.00091	0.99909	0.94793	32.63354
1953	59.5	0.00091	0.99909	0.94705	32.60300

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values



# Southwest Transmission Cooperative 2010 Depreciation Rate Study - Interim Retirement Rate Analysis



Transmission Plant Account: 35300  
Date of Retirement (Mid Year): 2054  
Interim Retirement Rate: 0.00316  
Study Date, Year-End: 2012  
Future Life from Study Date: 41.7  
Remaining Life (F/E + .5) = 22.6

Development of Interim Retirement Rate					
Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C/E
1952				\$0	0.00000
1953				\$0	0.00000
1954				\$0	0.00000
1955				\$0	0.00000
1956				\$0	0.00000
1957				\$0	0.00000
1958				\$0	0.00000
1959				\$0	0.00000
1960				\$0	0.00000
1961				\$0	0.00000
1962	\$105	\$0		\$105	0.00000
1963	\$18,966	\$0		\$19,071	0.00000
1964	\$12,732	\$0		\$31,746	0.00000
1965	\$15	\$0		\$31,761	0.00000
1966	\$27,912	\$0		\$59,673	0.00000
1967	\$8,813	(\$585)		\$59,306	0.00264
1968	\$0	\$0		\$59,306	0.00000
1969	\$272,319	(\$371)		\$340,054	0.00169
1970	\$184,283	\$0		\$524,337	0.00000
1971	\$67,692	\$0		\$592,189	0.00000
1972	\$802,886	(\$200,838)		\$1,164,217	0.19828
1973	\$422,547	(\$138)		\$1,586,688	0.00012
1974	\$47,846	(\$29,900)		\$1,610,163	0.01466
1975	\$817,825	(\$29,900)		\$2,403,878	0.00985
1976	\$1,263,995	(\$21,609)		\$3,644,344	0.00646
1977	\$915,208	(\$29,765)		\$4,536,767	0.00502
1978	\$2,303,830	\$0		\$6,840,597	0.00000
1979	\$8,463,879	(\$56,834)		\$13,268,622	0.00289
1980	\$5,256,415	\$0		\$18,525,038	0.00000
1981	\$0	(\$62,365)		\$18,462,670	0.00305
1982	\$3,121,536	(\$854,909)		\$21,235,305	0.01671
1983	\$84,893	(\$1,140)		\$21,306,725	0.00063
1984	\$162,444	(\$91,648)		\$21,379,520	0.00419
1985	\$1,523,661	(\$1,444)		\$22,901,353	0.00008
1986	\$2,244,565	(\$143,126)		\$24,403,762	0.03041
1987	\$0	(\$1,489)		\$24,402,270	0.00006
1988	\$187,848	(\$109,738)		\$24,490,378	0.00448
1989	\$53,079	(\$11,973)		\$24,521,444	0.00049
1990	\$1,771,316			\$26,292,800	0.00000
1991	\$391,320			\$26,624,120	0.00000
1992	\$62,885			\$26,676,775	0.00000
1993	\$273,831	(\$252,694)		\$26,697,912	0.00946
1994	\$407,304	(\$3,675)		\$27,101,541	0.00014
1995	\$1,745,194	(\$162,245)		\$28,686,489	0.00559
1996				\$28,686,489	0.00000
1997				\$28,686,489	0.00000
1998	\$77,802			\$28,764,291	0.00030
1999		(\$41,077)		\$28,723,214	0.00143
2000	\$45,293	(\$54,153)		\$28,715,354	0.00185
2001	\$4,584,052			\$33,279,406	0.00000
2002	\$9,861,888	(\$269,286)		\$42,576,029	0.00623
2003	\$1,605,919			\$44,271,948	0.00000
2004	\$1,145,094	(\$5,689)		\$45,411,358	0.00013
2005	\$1,020,882	(\$241,231)		\$46,141,007	0.00631
2006	\$5,412,586	(\$2,042)		\$51,550,930	0.00005
2007	\$2,107,295			\$53,658,135	0.00000
2008	\$906,231	(\$23,448)		\$54,239,998	0.00043
2009	\$6,839,804	(\$402,802)		\$60,476,660	0.00666
2010	\$2,146,519	(\$200,985)		\$62,402,896	0.00353
2011	\$20,279,113	(\$199,110)		\$82,542,889	0.00169
TOTAL	\$ 86,147,355	\$ (3,604,466)	\$	\$ 1,140,621,890	0.00316

Interim Retirement Life Table					
Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (D+1) * C	E	F
2012	0.5	0.00316	0.99684	0.99842	22.11270
2011	1.5	0.00316	0.99684	0.99526	22.04283
2010	2.5	0.00316	0.99684	0.99212	21.97317
2009	3.5	0.00316	0.99684	0.98898	21.90373
2008	4.5	0.00316	0.99684	0.98586	21.83451
2007	5.5	0.00316	0.99684	0.98274	21.76552
2006	6.5	0.00316	0.99684	0.97964	21.69674
2005	7.5	0.00316	0.99684	0.97654	21.62617
2004	8.5	0.00316	0.99684	0.97346	21.55583
2003	9.5	0.00316	0.99684	0.97038	21.48169
2002	10.5	0.00316	0.99684	0.96731	21.42378
2001	11.5	0.00316	0.99684	0.96426	21.35608
2000	12.5	0.00316	0.99684	0.96121	21.28859
1999	13.5	0.00316	0.99684	0.95817	21.22132
1998	14.5	0.00316	0.99684	0.95514	21.15426
1997	15.5	0.00316	0.99684	0.95213	21.08741
1996	16.5	0.00316	0.99684	0.94912	21.02077
1995	17.5	0.00316	0.99684	0.94612	20.95434
1994	18.5	0.00316	0.99684	0.94313	20.88812
1993	19.5	0.00316	0.99684	0.94015	20.82212
1992	20.5	0.00316	0.99684	0.93718	20.75632
1991	21.5	0.00316	0.99684	0.93422	20.69073
1990	22.5	0.00316	0.99684	0.93126	20.62534
1989	23.5	0.00316	0.99684	0.92832	20.56016
1988	24.5	0.00316	0.99684	0.92539	20.49519
1987	25.5	0.00316	0.99684	0.92246	20.43043
1986	26.5	0.00316	0.99684	0.91955	20.36586
1985	27.5	0.00316	0.99684	0.91664	20.30151
1984	28.5	0.00316	0.99684	0.91375	20.23735
1983	29.5	0.00316	0.99684	0.91086	20.17340
1982	30.5	0.00316	0.99684	0.90798	20.10965
1981	31.5	0.00316	0.99684	0.90511	20.04610
1980	32.5	0.00316	0.99684	0.90225	19.98275
1979	33.5	0.00316	0.99684	0.89940	19.91961
1978	34.5	0.00316	0.99684	0.89656	19.85666
1977	35.5	0.00316	0.99684	0.89372	19.79391
1976	36.5	0.00316	0.99684	0.89089	19.73136
1975	37.5	0.00316	0.99684	0.88808	19.66900
1974	38.5	0.00316	0.99684	0.88528	19.60680
1973	39.5	0.00316	0.99684	0.88248	19.54478
1972	40.5	0.00316	0.99684	0.87969	19.48283
1971	41.5	0.00316	0.99684	0.87691	19.42095
1970	42.5	0.00316	0.99684	0.87414	19.35913
1969	43.5	0.00316	0.99684	0.87138	19.29737
1968	44.5	0.00316	0.99684	0.86862	19.23566
1967	45.5	0.00316	0.99684	0.86586	19.17399
1966	46.5	0.00316	0.99684	0.86311	19.11236
1965	47.5	0.00316	0.99684	0.86036	19.05076
1964	48.5	0.00316	0.99684	0.85761	18.98919
1963	49.5	0.00316	0.99684	0.85486	18.92764
1962	50.5	0.00316	0.99684	0.85211	18.86610
1961	51.5	0.00316	0.99684	0.84936	18.80456
1960	52.5	0.00316	0.99684	0.84661	18.74302
1959	53.5	0.00316	0.99684	0.84386	18.68148
1958	54.5	0.00316	0.99684	0.84111	18.61994
1957	55.5	0.00316	0.99684	0.83836	18.55839
1956	56.5	0.00316	0.99684	0.83561	18.49685
1955	57.5	0.00316	0.99684	0.83286	18.43530
1954	58.5	0.00316	0.99684	0.83011	18.37376
1953	59.5	0.00316	0.99684	0.82736	18.31221

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

# Southwest Transmission Cooperative 2010 Depreciation Rate Study - Interim Retirement Rate Analysis



Transmission Plant Account: 35400  
Date of Retirement (Mid Year): 2038  
Interim Retirement Rate: 0.00001  
Study Date, Year-End: 2012  
Future Life from Study Date: 25.9  
Remaining Life (F/E - .5) = 26.5

Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C/E
1952				\$0	0.00000
1953				\$0	0.00000
1954				\$0	0.00000
1955				\$0	0.00000
1956				\$0	0.00000
1957				\$0	0.00000
1958				\$0	0.00000
1959				\$0	0.00000
1960				\$0	0.00000
1961				\$0	0.00000
1962				\$0	0.00000
1963				\$0	0.00000
1964				\$0	0.00000
1965				\$0	0.00000
1966				\$0	0.00000
1967				\$0	0.00000
1968				\$0	0.00000
1969				\$0	0.00000
1970				\$0	0.00000
1971				\$0	0.00000
1972				\$0	0.00000
1973				\$0	0.00000
1974	\$111,150			\$111,150	0.00000
1975	\$0			\$111,150	0.00000
1976	\$1,159,909			\$1,271,059	0.00000
1977	\$6,065,549			\$7,336,608	0.00000
1978	\$403,118			\$7,739,727	0.00000
1979	\$145,774			\$7,885,501	0.00000
1980	\$0			\$7,885,501	0.00000
1981	\$0			\$7,885,501	0.00000
1982	\$0			\$7,885,501	0.00000
1983	\$0			\$7,885,501	0.00000
1984	\$0			\$7,885,501	0.00000
1985	\$27,396			\$7,912,897	0.00000
1986	\$0			\$7,912,897	0.00000
1987	\$0			\$7,912,897	0.00000
1988	\$32,385			\$7,945,281	0.00000
1989	\$277,939			\$8,223,220	0.00000
1990	\$0			\$8,223,220	0.00000
1991	\$0			\$8,223,220	0.00000
1992	\$0			\$8,223,220	0.00000
1993	\$0			\$8,223,220	0.00000
1994	\$0			\$8,223,220	0.00000
1995	\$0			\$8,223,220	0.00000
1996	\$0	\$0		\$8,223,220	0.00000
1997	\$0	\$0		\$8,223,220	0.00000
1998	\$0	\$0		\$8,223,220	0.00000
1999	\$0	\$0		\$8,223,220	0.00000
2000	\$0	\$0		\$8,223,220	0.00000
2001	\$0	\$3,314		\$8,220,076	0.00000
2002	\$0	\$0		\$8,220,076	0.00000
2003	\$0	\$0		\$8,220,076	0.00000
2004	\$0	\$0		\$8,220,076	0.00000
2005	\$0	\$0		\$8,220,076	0.00000
2006	\$0	\$0		\$8,220,076	0.00000
2007	\$0	\$0		\$8,220,076	0.00000
2008	\$0	\$0		\$8,220,076	0.00000
2009	\$0	\$0		\$8,220,076	0.00000
2010	\$17,341	\$0		\$8,237,417	0.00000
2011	\$0	\$0		\$8,237,417	0.00000
TOTAL	\$ 8,240,562	\$ (3,143)		\$ 8,237,417	0.00001

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant (1)
A	B	C	D = (D+1) * C	E	F
2012	0.5	0.00001	0.99999	0.99999	25.99586
2011	1.5	0.00001	0.99999	0.99998	25.99569
2010	2.5	0.00001	0.99999	0.99997	25.99541
2009	3.5	0.00001	0.99999	0.99996	25.99512
2008	4.5	0.00001	0.99999	0.99995	25.99483
2007	5.5	0.00001	0.99999	0.99994	25.99454
2006	6.5	0.00001	0.99999	0.99993	25.99426
2005	7.5	0.00001	0.99999	0.99992	25.99397
2004	8.5	0.00001	0.99999	0.99991	25.99368
2003	9.5	0.00001	0.99999	0.99990	25.99340
2002	10.5	0.00001	0.99999	0.99988	25.99311
2001	11.5	0.00001	0.99999	0.99987	25.99282
2000	12.5	0.00001	0.99999	0.99986	25.99253
1999	13.5	0.00001	0.99999	0.99985	25.99225
1998	14.5	0.00001	0.99999	0.99984	25.99196
1997	15.5	0.00001	0.99999	0.99983	25.99167
1996	16.5	0.00001	0.99999	0.99982	25.99139
1995	17.5	0.00001	0.99999	0.99981	25.99110
1994	18.5	0.00001	0.99999	0.99980	25.99081
1993	19.5	0.00001	0.99999	0.99979	25.99052
1992	20.5	0.00001	0.99999	0.99977	25.99024
1991	21.5	0.00001	0.99999	0.99976	25.98995
1990	22.5	0.00001	0.99999	0.99975	25.98966
1989	23.5	0.00001	0.99999	0.99974	25.98938
1988	24.5	0.00001	0.99999	0.99973	25.98909
1987	25.5	0.00001	0.99999	0.99972	25.98880
1986	26.5	0.00001	0.99999	0.99971	25.98851
1985	27.5	0.00001	0.99999	0.99970	25.98823
1984	28.5	0.00001	0.99999	0.99969	25.98794
1983	29.5	0.00001	0.99999	0.99967	25.98765
1982	30.5	0.00001	0.99999	0.99966	25.98737
1981	31.5	0.00001	0.99999	0.99965	25.98708
1980	32.5	0.00001	0.99999	0.99964	25.98679
1979	33.5	0.00001	0.99999	0.99963	25.98650
1978	34.5	0.00001	0.99999	0.99962	24.98621
1977	35.5	0.00001	0.99999	0.99961	23.98592
1976	36.5	0.00001	0.99999	0.99960	22.98563
1975	37.5	0.00001	0.99999	0.99959	21.98534
1974	38.5	0.00001	0.99999	0.99957	20.98505
1973	39.5	0.00001	0.99999	0.99956	19.98476
1972	40.5	0.00001	0.99999	0.99955	18.98447
1971	41.5	0.00001	0.99999	0.99954	17.98418
1970	42.5	0.00001	0.99999	0.99953	16.98389
1969	43.5	0.00001	0.99999	0.99952	15.98360
1968	44.5	0.00001	0.99999	0.99951	14.98331
1967	45.5	0.00001	0.99999	0.99950	13.98302
1966	46.5	0.00001	0.99999	0.99949	12.98273
1965	47.5	0.00001	0.99999	0.99948	11.98244
1964	48.5	0.00001	0.99999	0.99946	10.98215
1963	49.5	0.00001	0.99999	0.99945	9.98186
1962	50.5	0.00001	0.99999	0.99944	8.98157
1961	51.5	0.00001	0.99999	0.99943	7.98128
1960	52.5	0.00001	0.99999	0.99942	6.98099
1959	53.5	0.00001	0.99999	0.99941	5.98070
1958	54.5	0.00001	0.99999	0.99940	4.98041
1957	55.5	0.00001	0.99999	0.99939	3.98012
1956	56.5	0.00001	0.99999	0.99937	2.97983
1955	57.5	0.00001	0.99999	0.99936	1.97954
1954	58.5	0.00001	0.99999	0.99935	0.97925
1953	59.5	0.00001	0.99999	0.99934	

(1) Unrealized Life = Sum Life Table from (n-1) for (Future Life - 5) values

# Southwest Transmission Cooperative 2010 Depreciation Rate Study - Interim Retirement Rate Analysis



Transmission Plant Account: 35500  
Date of Retirement (Mid Year): 2044  
Interim Retirement Rate: 0.00418  
Study Date, Year-End: 2012  
Future Life from Study Date: 31.7  
Remaining Life (F/E + .5) = 33.0

Development of Interim Retirement Rate					
Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1952	\$876,076			\$876,076	0.00000
1953	\$126,996			\$1,005,072	0.00000
1954				\$1,005,072	0.00000
1955				\$1,005,072	0.00000
1956				\$1,005,072	0.00000
1957				\$1,005,072	0.00000
1958				\$1,005,072	0.00000
1959				\$1,005,072	0.00000
1960				\$1,005,072	0.00000
1961				\$1,005,072	0.00000
1962				\$1,005,072	0.00000
1963	\$2,043			\$1,007,115	0.00000
1964	\$735,932			\$1,712,747	0.00000
1965				\$1,712,747	0.00000
1966				\$1,712,747	0.00000
1967				\$1,712,747	0.00000
1968				\$1,712,747	0.00000
1969	\$24,955			\$1,737,702	0.00000
1970				\$1,737,702	0.00000
1971				\$1,737,702	0.00000
1972				\$1,737,702	0.00000
1973				\$1,737,702	0.00000
1974	\$2,836,763			\$4,535,141	0.00000
1975	\$2,298			\$4,536,717	0.00016
1976	\$1,922,987			\$6,459,845	0.00000
1977				\$6,454,515	0.00079
1978	\$4,172,412			\$10,626,927	0.00000
1979	\$516,264			\$11,143,191	0.00000
1980				\$11,140,840	0.00021
1981				\$11,140,840	0.00000
1982	\$726,399			\$11,867,239	0.00000
1983				\$11,867,239	0.00000
1984	\$1,304,999			\$13,171,456	0.00006
1985				\$13,181,067	0.00079
1986				\$13,126,398	0.00264
1987				\$13,100,024	0.00201
1988				\$13,058,131	0.00321
1989	\$4,139,752			\$17,196,952	0.00064
1990				\$17,196,952	0.00000
1991				\$17,196,952	0.00000
1992				\$17,196,952	0.00000
1993	\$356,416			\$17,543,368	0.00000
1994	\$2,434,567			\$19,803,528	0.00881
1995	\$826,120			\$20,629,649	0.00000
1996	\$148,032			\$20,777,881	0.00000
1997	\$191,613			\$20,969,299	0.00000
1998	\$975,924			\$21,796,021	0.00455
1999	\$1,024,484			\$22,810,505	0.00000
2000	\$585,980			\$23,232,132	0.00707
2001	\$129,210			\$23,336,864	0.00097
2002	\$643,272			\$23,625,939	0.01084
2003	\$34,465			\$23,696,806	0.00100
2004	\$3,472,228			\$27,196,701	0.00219
2005	\$390,810			\$27,864,277	0.00704
2006	\$967,753			\$27,864,277	0.00345
2007	\$262,580			\$28,126,657	0.00000
2008	\$263,439			\$28,410,096	0.00000
2009	\$1,126,955			\$29,410,096	0.00379
2010	\$296,328			\$29,038,233	0.00458
2011	\$5,734,889			\$34,697,638	0.00130
TOTAL	\$37,718,074	\$ (3,020,236)	\$	\$ 723,353,363	0.00418

Interim Retirement Life Table					
Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant (t)
A	B	C	D = (D+1) * C	E	F
2012	0.5	0.00418	0.99582	0.99791	32.42205
2011	1.5	0.00418	0.99582	0.99375	32.28668
2010	2.5	0.00418	0.99582	0.98960	32.15187
2009	3.5	0.00418	0.99582	0.98546	32.01763
2008	4.5	0.00418	0.99582	0.98135	31.88395
2007	5.5	0.00418	0.99582	0.97725	31.75082
2006	6.5	0.00418	0.99582	0.97317	31.61826
2005	7.5	0.00418	0.99582	0.96911	31.48624
2004	8.5	0.00418	0.99582	0.96506	31.35478
2003	9.5	0.00418	0.99582	0.96103	31.22386
2002	10.5	0.00418	0.99582	0.95702	31.09349
2001	11.5	0.00418	0.99582	0.95303	30.96367
2000	12.5	0.00418	0.99582	0.94905	30.83439
1999	13.5	0.00418	0.99582	0.94508	30.70565
1998	14.5	0.00418	0.99582	0.94114	30.57744
1997	15.5	0.00418	0.99582	0.93721	30.44977
1996	16.5	0.00418	0.99582	0.93329	30.32264
1995	17.5	0.00418	0.99582	0.92940	30.19603
1994	18.5	0.00418	0.99582	0.92552	30.06996
1993	19.5	0.00418	0.99582	0.92165	29.94441
1992	20.5	0.00418	0.99582	0.91781	29.81938
1991	21.5	0.00418	0.99582	0.91397	29.69488
1990	22.5	0.00418	0.99582	0.91016	29.57089
1989	23.5	0.00418	0.99582	0.90636	29.44743
1988	24.5	0.00418	0.99582	0.90257	29.32448
1987	25.5	0.00418	0.99582	0.89878	29.20207
1986	26.5	0.00418	0.99582	0.89505	29.08022
1985	27.5	0.00418	0.99582	0.89131	28.95893
1984	28.5	0.00418	0.99582	0.88759	28.83817
1983	29.5	0.00418	0.99582	0.88389	28.71793
1982	30.5	0.00418	0.99582	0.88020	28.59823
1981	31.5	0.00418	0.99582	0.87652	28.47907
1980	32.5	0.00418	0.99582	0.87286	28.36045
1979	33.5	0.00418	0.99582	0.86922	28.24236
1978	34.5	0.00418	0.99582	0.86559	28.12480
1977	35.5	0.00418	0.99582	0.86197	28.00776
1976	36.5	0.00418	0.99582	0.85838	27.89123
1975	37.5	0.00418	0.99582	0.85479	27.77520
1974	38.5	0.00418	0.99582	0.85122	27.65967
1973	39.5	0.00418	0.99582	0.84767	27.54464
1972	40.5	0.00418	0.99582	0.84413	27.43011
1971	41.5	0.00418	0.99582	0.84060	27.31608
1970	42.5	0.00418	0.99582	0.83709	27.20255
1969	43.5	0.00418	0.99582	0.83360	27.08952
1968	44.5	0.00418	0.99582	0.83012	26.97699
1967	45.5	0.00418	0.99582	0.82665	26.86496
1966	46.5	0.00418	0.99582	0.82320	26.75343
1965	47.5	0.00418	0.99582	0.81976	26.64240
1964	48.5	0.00418	0.99582	0.81634	26.53187
1963	49.5	0.00418	0.99582	0.81293	26.42184
1962	50.5	0.00418	0.99582	0.80954	26.31231
1961	51.5	0.00418	0.99582	0.80616	26.20328
1960	52.5	0.00418	0.99582	0.80279	26.09475
1959	53.5	0.00418	0.99582	0.79944	25.98672
1958	54.5	0.00418	0.99582	0.79610	25.87919
1957	55.5	0.00418	0.99582	0.79276	25.77216
1956	56.5	0.00418	0.99582	0.78947	25.66563
1955	57.5	0.00418	0.99582	0.78617	25.55960
1954	58.5	0.00418	0.99582	0.78289	25.45407
1953	59.5	0.00418	0.99582	0.77962	25.34904

(1) Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

# Southwest Transmission Cooperative 2010 Depreciation Rate Study - Interim Retirement Rate Analysis



Transmission Plant Account: 35600  
Date of Retirement (Mid Year): 2042  
Interim Retirement Rate: 0.00266  
Study Date, Year-End: 2012  
Future Life from Study Date: 29.8  
Remaining Life (F/E + 5) = 29.3

Development of Interim Retirement Rate					
Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1952	\$457,758			\$457,758	0.00000
1953	\$23,434			\$481,192	0.00000
1954				\$481,192	0.00000
1955				\$481,192	0.00000
1956				\$481,192	0.00000
1957				\$481,192	0.00000
1958	\$107,728			\$588,918	0.00000
1959				\$588,918	0.00000
1960				\$588,918	0.00000
1961				\$588,918	0.00000
1962				\$588,918	0.00000
1963				\$588,918	0.00000
1964	\$260,077			\$848,995	0.00000
1965				\$848,995	0.00000
1966				\$848,995	0.00000
1967				\$848,995	0.00000
1968				\$848,995	0.00000
1969	\$187,469			\$1,036,464	0.00000
1970				\$1,036,464	0.00000
1971				\$1,036,464	0.00000
1972				\$1,036,464	0.00000
1973				\$1,036,464	0.00000
1974	\$1,537,672			\$2,574,136	0.00000
1975	\$20,047	(\$17,195)		\$2,577,001	0.00667
1976	\$1,602,066			\$4,258,090	0.00000
1977	\$3,700,291	(\$2,280)		\$7,957,331	0.00026
1978	\$3,744,978			\$11,702,309	0.00000
1979	\$376,911			\$12,079,220	0.00000
1980	\$4,213			\$12,083,434	0.00000
1981				\$12,083,434	0.00000
1982	\$290,456			\$12,373,890	0.00000
1983				\$12,373,890	0.00000
1984	\$423,697	(\$1,801)		\$12,796,265	0.00010
1985				\$12,796,265	0.00000
1986				\$12,795,671	0.00005
1987				\$12,795,671	0.00000
1988				\$12,795,671	0.00000
1989	\$1,479,022			\$14,274,694	0.00000
1990				\$14,274,694	0.00000
1991				\$14,274,694	0.00000
1992				\$14,274,694	0.00000
1993				\$14,274,694	0.00000
1994	\$261,088	(\$1,813)		\$14,533,969	0.00012
1995	\$95,757			\$14,599,756	0.00000
1996	\$127,275			\$14,727,031	0.00000
1997				\$14,727,031	0.00000
1998	\$399,152	(\$30,744)		\$15,089,439	0.00244
1999		(\$29,702)		\$15,059,737	0.00197
2000	\$103,132	(\$57,070)		\$15,075,790	0.00578
2001	\$16,045	(\$27,003)		\$15,068,842	0.00152
2002	\$19,760	(\$290,367)		\$14,888,322	0.01346
2003	\$0	(\$94,300)		\$14,879,986	0.00653
2004	\$2,754,351	\$0		\$17,633,317	0.00000
2005	\$1,097,129	\$0		\$18,730,446	0.00000
2006	\$464,868	(\$731,121)		\$18,464,121	0.03980
2007		\$0		\$18,464,121	0.00000
2008	\$0			\$18,464,121	0.00000
2009		(\$290,466)		\$18,173,685	0.01598
2010	\$10,139	\$0		\$18,183,804	0.00000
2011	\$2,748,466	(\$341)		\$20,931,349	0.00004
TOTAL	\$ 22,963,051	\$ (1,431,702)	\$	\$ 538,935,195	0.00266

Interim Retirement Life Table					
Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant (1)
A	B	C	D = (D+1) * C	E	F
2012	0.5	0.00266	0.99734	0.99867	28.75760
2011	1.5	0.00266	0.99734	0.99802	28.68121
2010	2.5	0.00266	0.99734	0.99737	28.60501
2009	3.5	0.00266	0.99734	0.99673	28.52902
2008	4.5	0.00266	0.99734	0.99610	28.45323
2007	5.5	0.00266	0.99734	0.99548	28.37765
2006	6.5	0.00266	0.99734	0.99486	28.30226
2005	7.5	0.00266	0.99734	0.99425	28.22707
2004	8.5	0.00266	0.99734	0.99364	28.15209
2003	9.5	0.00266	0.99734	0.99303	28.07730
2002	10.5	0.00266	0.99734	0.99242	28.00271
2001	11.5	0.00266	0.99734	0.99181	27.92832
2000	12.5	0.00266	0.99734	0.99120	27.85413
1999	13.5	0.00266	0.99734	0.99059	27.78013
1998	14.5	0.00266	0.99734	0.98998	27.70634
1997	15.5	0.00266	0.99734	0.98937	27.63273
1996	16.5	0.00266	0.99734	0.98876	27.55933
1995	17.5	0.00266	0.99734	0.98815	27.48611
1994	18.5	0.00266	0.99734	0.98754	27.41309
1993	19.5	0.00266	0.99734	0.98693	27.34027
1992	20.5	0.00266	0.99734	0.98632	27.26764
1991	21.5	0.00266	0.99734	0.98571	27.19520
1990	22.5	0.00266	0.99734	0.98510	27.12296
1989	23.5	0.00266	0.99734	0.98449	27.05080
1988	24.5	0.00266	0.99734	0.98388	26.97894
1987	25.5	0.00266	0.99734	0.98327	26.90737
1986	26.5	0.00266	0.99734	0.98266	26.83609
1985	27.5	0.00266	0.99734	0.98205	26.76460
1984	28.5	0.00266	0.99734	0.98144	26.69350
1983	29.5	0.00266	0.99734	0.98083	26.62259
1982	30.5	0.00266	0.99734	0.98022	26.55189
1981	31.5	0.00266	0.99734	0.97961	26.48130
1980	32.5	0.00266	0.99734	0.97900	26.41081
1979	33.5	0.00266	0.99734	0.97839	26.34042
1978	34.5	0.00266	0.99734	0.97778	26.27013
1977	35.5	0.00266	0.99734	0.97717	26.20004
1976	36.5	0.00266	0.99734	0.97656	26.13005
1975	37.5	0.00266	0.99734	0.97595	26.06026
1974	38.5	0.00266	0.99734	0.97534	25.99057
1973	39.5	0.00266	0.99734	0.97473	25.92098
1972	40.5	0.00266	0.99734	0.97412	25.85149
1971	41.5	0.00266	0.99734	0.97351	25.78200
1970	42.5	0.00266	0.99734	0.97290	25.71261
1969	43.5	0.00266	0.99734	0.97229	25.64322
1968	44.5	0.00266	0.99734	0.97168	25.57383
1967	45.5	0.00266	0.99734	0.97107	25.50444
1966	46.5	0.00266	0.99734	0.97046	25.43505
1965	47.5	0.00266	0.99734	0.96985	25.36566
1964	48.5	0.00266	0.99734	0.96924	25.29627
1963	49.5	0.00266	0.99734	0.96863	25.22688
1962	50.5	0.00266	0.99734	0.96802	25.15749
1961	51.5	0.00266	0.99734	0.96741	25.08810
1960	52.5	0.00266	0.99734	0.96680	25.01871
1959	53.5	0.00266	0.99734	0.96619	24.94932
1958	54.5	0.00266	0.99734	0.96558	24.87993
1957	55.5	0.00266	0.99734	0.96497	24.81054
1956	56.5	0.00266	0.99734	0.96436	24.74115
1955	57.5	0.00266	0.99734	0.96375	24.67176
1954	58.5	0.00266	0.99734	0.96314	24.60237
1953	59.5	0.00266	0.99734	0.96253	24.53298

(1) Unrealized Life = Sum Life Table from (n-1) for (Future Life - 5) values

# Southwest Transmission Cooperative 2010 Depreciation Rate Study - Interim Retirement Rate Analysis



Transmission Plant Account: 35900  
Date of Retirement (Mid Year): 2051  
Interim Retirement Rate: 0.00000  
Study Date, Year-End: 2012  
Future Life from Study Date: 39.2  
Remaining Life (F/E + .5) = 39.5

Development of Interim Retirement Rate					
Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C/E
1952				\$0	0.00000
1953				\$0	0.00000
1954				\$0	0.00000
1955				\$0	0.00000
1956				\$0	0.00000
1957				\$0	0.00000
1958				\$0	0.00000
1959				\$0	0.00000
1960				\$0	0.00000
1961				\$0	0.00000
1962				\$0	0.00000
1963				\$0	0.00000
1964				\$0	0.00000
1965				\$0	0.00000
1966				\$0	0.00000
1967				\$0	0.00000
1968				\$0	0.00000
1969				\$0	0.00000
1970				\$0	0.00000
1971				\$0	0.00000
1972				\$0	0.00000
1973				\$0	0.00000
1974				\$0	0.00000
1975				\$0	0.00000
1976	\$125,405			\$125,405	0.00000
1977				\$125,405	0.00000
1978				\$125,405	0.00000
1979				\$125,405	0.00000
1980				\$125,405	0.00000
1981				\$125,405	0.00000
1982				\$125,405	0.00000
1983				\$125,405	0.00000
1984				\$125,405	0.00000
1985				\$125,405	0.00000
1986				\$125,405	0.00000
1987				\$125,405	0.00000
1988				\$125,405	0.00000
1989				\$125,405	0.00000
1990				\$125,405	0.00000
1991				\$125,405	0.00000
1992				\$125,405	0.00000
1993				\$125,405	0.00000
1994				\$125,405	0.00000
1995				\$125,405	0.00000
1996	\$18,591			\$143,996	0.00000
1997				\$143,996	0.00000
1998				\$143,996	0.00000
1999	\$31,383			\$175,379	0.00000
2000				\$175,379	0.00000
2001				\$175,379	0.00000
2002				\$175,379	0.00000
2003				\$175,379	0.00000
2004				\$175,379	0.00000
2005	\$40,500			\$221,938	0.00000
2006				\$221,938	0.00000
2007				\$221,938	0.00000
2008				\$221,938	0.00000
2009				\$221,938	0.00000
2010				\$221,938	0.00000
2011	\$65,910			\$307,848	0.00000
TOTAL	\$ 307,848	\$ -	\$ -	\$ 5,831,829	0.00000

Interim Retirement Life Table					
Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (D+1) * C	E	F
2012	0.5	-	1.00000	1.00000	39.00000
2011	1.5	-	1.00000	1.00000	39.00000
2010	2.5	-	1.00000	1.00000	39.00000
2009	3.5	-	1.00000	1.00000	39.00000
2008	4.5	-	1.00000	1.00000	39.00000
2007	5.5	-	1.00000	1.00000	39.00000
2006	6.5	-	1.00000	1.00000	39.00000
2005	7.5	-	1.00000	1.00000	39.00000
2004	8.5	-	1.00000	1.00000	39.00000
2003	9.5	-	1.00000	1.00000	39.00000
2002	10.5	-	1.00000	1.00000	39.00000
2001	11.5	-	1.00000	1.00000	39.00000
2000	12.5	-	1.00000	1.00000	39.00000
1999	13.5	-	1.00000	1.00000	39.00000
1998	14.5	-	1.00000	1.00000	39.00000
1997	15.5	-	1.00000	1.00000	39.00000
1996	16.5	-	1.00000	1.00000	39.00000
1995	17.5	-	1.00000	1.00000	39.00000
1994	18.5	-	1.00000	1.00000	39.00000
1993	19.5	-	1.00000	1.00000	39.00000
1992	20.5	-	1.00000	1.00000	39.00000
1991	21.5	-	1.00000	1.00000	38.00000
1990	22.5	-	1.00000	1.00000	37.00000
1989	23.5	-	1.00000	1.00000	36.00000
1988	24.5	-	1.00000	1.00000	35.00000
1987	25.5	-	1.00000	1.00000	34.00000
1986	26.5	-	1.00000	1.00000	33.00000
1985	27.5	-	1.00000	1.00000	32.00000
1984	28.5	-	1.00000	1.00000	31.00000
1983	29.5	-	1.00000	1.00000	30.00000
1982	30.5	-	1.00000	1.00000	29.00000
1981	31.5	-	1.00000	1.00000	28.00000
1980	32.5	-	1.00000	1.00000	27.00000
1979	33.5	-	1.00000	1.00000	26.00000
1978	34.5	-	1.00000	1.00000	25.00000
1977	35.5	-	1.00000	1.00000	24.00000
1976	36.5	-	1.00000	1.00000	23.00000
1975	37.5	-	1.00000	1.00000	22.00000
1974	38.5	-	1.00000	1.00000	21.00000
1973	39.5	-	1.00000	1.00000	20.00000
1972	40.5	-	1.00000	1.00000	19.00000
1971	41.5	-	1.00000	1.00000	18.00000
1970	42.5	-	1.00000	1.00000	17.00000
1969	43.5	-	1.00000	1.00000	16.00000
1968	44.5	-	1.00000	1.00000	15.00000
1967	45.5	-	1.00000	1.00000	14.00000
1966	46.5	-	1.00000	1.00000	13.00000
1965	47.5	-	1.00000	1.00000	12.00000
1964	48.5	-	1.00000	1.00000	11.00000
1963	49.5	-	1.00000	1.00000	10.00000
1962	50.5	-	1.00000	1.00000	9.00000
1961	51.5	-	1.00000	1.00000	8.00000
1960	52.5	-	1.00000	1.00000	7.00000
1959	53.5	-	1.00000	1.00000	6.00000
1958	54.5	-	1.00000	1.00000	5.00000
1957	55.5	-	1.00000	1.00000	4.00000
1956	56.5	-	1.00000	1.00000	3.00000
1955	57.5	-	1.00000	1.00000	2.00000
1954	58.5	-	1.00000	1.00000	1.00000
1953	59.5	-	1.00000	1.00000	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

## **SUMMARY & CONCLUSIONS**

Based on our analysis of the information provided by SWTC and the results of our on-site observations of the SWTC system facilities, Burns & McDonnell has formulated estimates of the remaining useful service lives for the transmission system assets. From this, proposed depreciation rates have been developed for all of the Cooperative's transmission assets utilizing historical accounting records data, other published depreciation survey information, the experience of Burns & McDonnell's depreciation consultants, and generally-accepted depreciation standards and methodologies.

Assuming that any damaged and older components of the equipment are either repaired or replaced, Burns & McDonnell finds that (from an engineering perspective) all of SWTC's transmission system could remain in reliable operating service well into the future. This conclusion is conditioned by the forthcoming statement of limiting conditions.

Therefore, Burns & McDonnell recommends to SWTC that it consider pursuing approval and implementation of the proposed depreciation rates for each RUS transmission account as presented in this report. These proposed depreciation rates are projected to decrease the total annual depreciation expense of SWTC by approximately 32 percent.

## **STATEMENT OF LIMITING CONDITIONS**

The analysis and results of the Study developed and presented herein by Burns & McDonnell are based on sound engineering and economic theory. However, certain factors and parameters affecting the performance of the Study must be clearly stated. The estimated remaining useful lives, net salvage rates, and proposed depreciation rates are provided subject to the following limiting conditions:

1. All existing information and facts known to SWTC were assumed to have been made available.
2. Assessments of the condition of the assets were based solely on casual observations. No detailed testing of any of the equipment or facilities was performed by Burns & McDonnell.

3. Continuation of generally accepted levels of and procedures for operation and maintenance of the transmission system throughout the remaining life was assumed.
4. Emphasis on the engineering assessment of the generating assets and transmission assets was assumed. No physical inspection of the general plant assets was made.

In the preparation of this report, the information provided to us by SWTC was used by Burns & McDonnell to make certain assumptions with respect to conditions that may exist in the future. While we believe the assumptions made are reasonable for the purposes of this report, we make no representation that the conditions assumed will, in fact, occur. In addition, while we have no reason to believe that the information provided to us by SWTC, and on which we have relied, is inaccurate in any material respect, we have not independently verified such information and cannot guarantee its accuracy or completeness. To the extent that actual future conditions differ from those assumed herein or from the information provided to us, the actual results will vary from those projected.

\* \* \* \* \*

PART I - INTRODUCTION



## **PART I INTRODUCTION**

This report describes the Comprehensive Depreciation Study completed by Burns & McDonnell Engineering Company for SWTC Electric Corporation (as of December 31, 2011). The Study was prepared in accordance with Burns & McDonnell's letter and scope of service dated December 20, 2011. The Study desired by SWTC was to be performed for all transmission facilities accounted for in accordance with RUS Bulletin 1767B-1, Uniform System of Accounts.

Part II of the Study, Engineering Assessment, is intended to address the issues identified by the RUS to be covered in the Study:

- Discussion of facility basic design and equipment
- Analysis of system historical performance
- Review of on-site inspection and analysis of physical condition
- Discussion of SWTC's operation and maintenance
- Analysis of external and environmental factors affecting asset useful lives
- Statement of opinion regarding remaining economic lives and proper depreciation rates

Descriptions of the SWTC transmission assets inspected are provided, along with assessments of the current physical condition of each substation developed through the on-site observations of the facilities. The engineering assessment presented in Part II addresses each of the above areas, with the exception of the development of proposed depreciation rates.

The analyses leading to formulation of proposed new depreciation rates for SWTC are described in Part III. Part III provides brief descriptions of the alternative methods used in calculating depreciation rates and identifies the specific method used, as well as the various considerations and assumptions made, in developing the actuarial analyses for each account. Detailed calculations for all the accounts are provided in Appendix A.

Part IV of the Study summarizes the results of the Study and quantifies the estimated impact of the proposed depreciation rates on SWTC's annual depreciation expense accrual.

### **SOUTHWEST TRANSMISSION COOPERATIVE**

SWTC is a transmission cooperative that provides bulk wholesale transmission service to its member distribution cooperatives, with delivery through high-voltage transmission facilities it owns and operates. SWTC was established as a cooperative and is operated under the authority of the RUS, an agency within the United States Department of Agriculture. SWTC is headquartered in Benson, Arizona and provides wholesale transmission to all or part of 10 counties in southern Arizona and one in California.

SWTC owns and operates approximately 620 miles of transmission lines operated at 69 kV, 115 kV, 230 kV, 345 kV, and 500 kV. In addition, the Cooperative's transmission system includes 26 electric substations with over 3,901 MV of transformer capacity.

### **PURPOSE OF STUDY**

SWTC requires a comprehensive depreciation study be performed in accordance with RUS Bulletin 1767B-1, Uniform System of Accounts every five years.

SWTC solicited a proposal for services for and retained Burns & McDonnell to perform the Study in accordance with RUS guidelines. This Study includes:

- A discussion of several transmission substation's basic design and equipment
- A discussion of the composition of the transmission system
- An on-site review and analysis of several substations and their current physical condition
- A discussion of the operating and maintenance procedures for the transmission system
- External factors that may impact the transmission system and its remaining useful life

### **PROJECT APPROACH**

Burns & McDonnell's approach to meeting the above stated requirements for the Study was based on the performance of physical site observations of the transmission system. Transmission

engineers then applied their experience and engineering judgment in approximating the remaining lives of each of SWTC's transmission system Accounts. The activities performed during the site visits at each substation included:

- Observation of transmission equipment and facilities
- Evaluation of equipment and facilities condition
- Interview of transmission operating and maintenance staff
- Determination of transmission system operating and maintenance practices
- Assessment of transmission operating and maintenance experiences
- Collection of other pertinent operating information
- Development of facilities descriptions

The physical site observations of the system facilities did not include any internal inspections or examinations, environmental testing, or the completion of any performance tests on the equipment and facilities. No mathematical modeling analysis was included in the scope of the facilities observations.

SWTC did not have historical removal cost and salvage accounting data available in order to assess whether specific detailed estimates of terminal removal costs and net salvage values for the SWTC transmission assets could be developed with reasonable substantiation. Therefore, industry standards and the past experience of Burns & McDonnell's depreciation consultants with other utilities were considered in the projected net salvage values.

The projected remaining economic lives of the various generating and transmission assets and the estimates of the net salvage values were then factored into the depreciation rate analysis performed by Burns & McDonnell's depreciation consultants. The Study included analysis of the service life characteristics, net salvage values, and depreciation reserves for the transmission system. Raw historical transmission system accounting data from 1952 to 2011 was obtained from SWTC's Accounting system.

Generally accepted depreciation study procedures and actuarial analyses widely used by the

utility industry were followed. Actuarial analyses of average service lives and dispersions based on historical characteristics of the asset retired for each active RUS transmission account since inception were developed. Either the Whole Life method or the Life Span method with the Remaining Life technique was used to calculate the proposed depreciation rate for each account, depending on the nature of the types of property units included in an account.

## **SOURCES OF DATA**

Much of the information used in the analysis of SWTC's depreciation rates was provided by SWTC's staff. This included various computer-generated accounting data from SWTC's Accounting system, certain performance results, budgets, inspection reports, technical documents such as drawings and specifications, a Construction Work Plan, policies and procedure manuals, and other documents. Historical data from 1952 to 2011 as recorded in SWTC's Accounting system was used throughout the analyses.

In addition, site visits were conducted at a variety of SWTC's transmission substations, transmission lines, and other transmission system assets. Key transmission, maintenance, and accounting staff were interviewed and the condition of the facilities was discussed and assessed during these site visits.

\* \* \* \* \*

**PART II – ENGINEERING ASSESSMENT**

## **PART II**

### **ENGINEERING ASSESSMENT**

#### **OVERVIEW**

This section of the Study provides the engineering assessment of SWTC's transmission system including structures, substations, poles, lines, towers, and station equipment. During the Study, the following efforts were conducted to examine SWTC's transmission system from an engineering perspective:

1. Review of SWTC's retirement records and history
2. Analysis of current operating and maintenance practices
3. Completion of physical site inspections
4. Estimation of the remaining service life of major transmission facilities

The engineering assessments of a representative sample of the major transmission substations, structures, poles, lines and towers are presented in the following portions of this section of the Study. The analyses leading to formulation of proposed new depreciation rates for SWTC are described in Part III.

#### **TRANSMISSION SUBSTATIONS**

This section of the Study provides an engineering assessment of SWTC's transmission substations physically inspected by Burns & McDonnell. SWTC has approximately 30 substations and 1,800 miles of transmission lines located throughout southern and west central Arizona. It would be time prohibitive to physically inspect all of the SWTC transmission system, so it was the objective of Burns & McDonnell to select a representative sample of SWTC transmission system assets to inspect. The following seventeen substations located in the vicinity of Benson and Tucson, Arizona were physically inspected by Burns & McDonnell.

##### Substations

Apache 230 kV Substation (Apache)  
Avra Valley Substation (Avra Valley)  
Bicknell Substation (Bicknell)  
Butterfield Substation (Butterfield)

Kartchner Substation (Kartchner)  
New Tucson Substation (New Tucson)  
Oracle Substation (Oracle)  
Pantano Substation (Pantano)  
Saddlebrooke Ranch Substation (Saddlebrooke Ranch)  
Sahuarita Substation (Sahuarita)  
San Rafael Substation (San Rafael)  
Sandario Substation (Sandario)  
Thornsdale Substation (Thornsdale)  
Three Points Substation (Three Points)  
Vail Substation (Vail)  
Valencia Substation (Valencia)  
Winchester Substation (Winchester)

On April 18 and 19, 2012, Mr. Ted Kelly and Mr. Jon Summerville of Burns & McDonnell met with representatives of SWTC to discuss the condition, operations, and maintenance of SWTC's transmission system. Mr. Ron Knutson and Mr. Keith Jacobs of SWTC were the individuals with whom Burns & McDonnell conducted transmission substation inspections and discussed each substation's condition, operation and maintenance.

During the substation inspections, Burns & McDonnell first verified that each major piece of equipment shown on the power delivery network one-line diagram was currently in service at the respective substation. Major substation equipment included transformers, circuit breakers, circuit switchers, and control buildings.

Burns & McDonnell then visually assessed the condition of the major pieces of equipment at each substation. In addition to the major equipment listed above, Burns & McDonnell also assessed the condition of the supporting structures, oil containment, fencing, meters, security, and other outdoor infrastructure. In general, Burns & McDonnell found SWTC's substations to be in excellent condition, maintained at a high level and had low levels of stress in comparison to similar assets in other electric utility systems. Further, several SWTC substations are jointly owned and it was clear that the areas of the substation owned by SWTC were generally better maintained than the areas owned by other utilities.

### Apache Substation

The Apache substation is SWTC's oldest and largest substation. Apache was installed in 1963 and is located in the east-central portion of SWTC's territory on the site of the 600 MW Apache Generation facility. Apache has the following equipment:

- a 230 kV line connecting to Redtail Substation,
- a 230 kV line connecting to Winchester Substation,
- a 230 kV line connecting to Butterfield Switchstation,
- a 115 kV line connecting to APS Hayden Substation,
- a Western Area Power Administration (WAPA) 115 kV line connecting to Adams & Nogales Tap,
- three 69 kV lines connecting to Sulphur Springs Valley Electric Cooperative (SSVEC),
- five 230 kV transformers,
- twelve 230 kV circuit breakers (three oil, nine gas),
- four 115 kV transformer,
- seven 115 kV circuit breakers,
- one 115 kV circuit breaker owned by Western,
- two 69 kV transformers,
- one 69 kV transformer owned by SSVEC,
- nine 69 kV circuit breakers (four oil, five gas).

Two control buildings located within the substation contain all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for the substation transformers, breakers and the associated transmission lines that enter and exit the substation.

A physical observation of Apache was made on April 18, 2012. The substation appears to be in good working condition. There were some signs of surface rust located on the steel structures and some of the major equipment (which would be expected for equipment of this age and do not affect the structural integrity of the equipment) which SWTC is replacing. There were no signs of current or past oil leaks from any of the oil insulated equipment.



### **Avra Valley Substation**

The Avra Valley substation was installed in 1997 and is located on the western side of SWTC's territory close to Sandario. Avra Valley also contains 25 kV assets owned by Trico Electric Cooperative (TRICO). Avra Valley has:

- a 115 kV line connecting to Marana,
- a 115 kV line connecting to Sandario,
- one 115 kV transformer,
- three 115 kV circuit breakers.
- 25kV feeders that are owned by TRICO.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for the substation transformers, breakers and the associated transmission lines that enter and exit the substation.

A physical observation of Avra Valley was made on April 19, 2012. The substation appears to be in very good working condition, however, some foundation footings close to the transformer had very small hairline surface cracks. While this may not be normal for a substation this new, there is no cause for concern in the near-term because SWTC is aware of the condition and monitoring the footings. There is no oil insulated equipment at Avra Valley.

### **Bicknell Substation**

The Bicknell substation was installed in 1975 and located in the southwest portion of SWTC's territory. Bicknell has:

- a 345 kV line going out to Vail,
- a 230 kV line going out to Sahuarita,
- a 115 kV line coming in from Three Points,
- a 115 kV line going out of Bicknell owned by FMI,
- a 25 kV line and 69 kV line going out that are owned by TRICO,
- one 345 kV transformer,
- two 230 kV transformers,

- two 115 kV transformers,
- four 230 kV circuit breakers,
- six 115 kV circuit breakers (three oil, three gas),
- one 115 kV circuit switcher,
- two 69 kV circuit breakers,
- one 25 kV circuit breaker.
- 25kV feeders that are owned by TRICO.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for the substation transformers, breakers and the associated transmission lines that enter and exit the substation.

A physical observation of Bicknell was made on April 19, 2012. The substation appears to be in good working condition. There were no signs of current or past oil leaks from any of the oil insulated equipment.

### **Butterfield Switchstation**

Butterfield is a small substation that was installed in 1989 and is located in the east-central portion of SWTC's territory. Butterfield has:

- a 230 kV line coming in from Apache,
- a 230 kV line going out to San Rafael,
- a 230 kV line going out to Pantano,
- three 230 kV circuit breakers.

A control building located within the substation contains all of the electrical controls associated with both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation breakers and the associated transmission lines that enter and exit the substation.

# Exhibit PS-2

Table ES-1: 2012 Depreciation Rate Study Summary

# Southwest Transmission Cooperative

## 2012 Depreciation Rate Study - Rate Analysis Summary

Account	Description	As of December 31, 2011			Existing Depreciation Rate	Average Service Life	Remaining Life/Average Service Life	Net Salvage Factor	Proposed Depreciation Rate [1]	Annual Depreciation Expense		
		Plant Balance	Reserve Balance	Reserve Ratio						@ Existing Expense	@ Proposed Expense	Expense Variance
		- \$ -	- \$ -		- % -	- Years -	- Years -	- % -	- % -	- \$ -	- \$ -	- \$ -
<b>TRANSMISSION PLANT</b>												
35200	Structures & Improvement [2]	\$5,571,342	\$2,986,027	53.6	2.75%	57.0	34.9	-5.00%	1.47%	\$153,212	\$81,984	(\$71,228)
35300	Station Equipment [1]	\$82,542,898	\$31,946,843	38.7	2.75%	55.0	22.6	-5.00%	1.91%	\$2,269,930	\$1,575,819	(\$694,111)
35400	Towers & Fixtures [2]	\$8,237,417	\$6,684,920	81.2	2.75%	60.0	26.5	-5.00%	0.90%	\$226,529	\$74,138	(\$152,391)
35500	Poles & Fixtures [1]	\$34,697,838	\$15,926,339	45.9	2.75%	52.0	33.0	-5.00%	2.02%	\$954,191	\$700,629	(\$253,561)
35600	Overhead Conductors [1]	\$20,931,349	\$12,716,412	60.8	2.75%	55.0	29.3	-5.00%	1.91%	\$575,612	\$399,598	(\$176,014)
35900	Roads and Trails [2]	\$307,849	\$137,302	44.6	2.75%	57.0	39.5	-5.00%	1.53%	\$8,466	\$4,707	(\$3,759)
	<b>Subtotal</b>	<b>\$152,288,692</b>	<b>\$70,397,843</b>							<b>\$4,187,939</b>	<b>\$2,836,876</b>	<b>(\$1,351,063)</b>

[1] Whole Life Method depreciation

[2] Life Span Method depreciation

**TOTAL**

**\$152,288,692    \$70,397,843**

**\$4,187,939    \$2,836,876    (\$1,351,063)**

B

**DIRECT TESTIMONY OF GARY E. PIERSON**  
**ON BEHALF OF**  
**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**GENERAL RATES APPLICATION**

**August 2012**

1                                   **DIRECT TESTIMONY OF GARY E. PIERSON**

2                                   **ON BEHALF OF**

3                                   **SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

4    **Q.     Please state your name and address for the record.**

5    A.     My name is Gary E. Pierson. My business address is 1000 South Highway 80, Benson,  
6            Arizona 85602.

7    **Q.     By whom are you employed and in what capacity?**

8    A.     I am employed by Sierra Southwest Cooperative Services, Inc. ("Sierra Southwest") as  
9            the Manager of Financial Services. As Manager of Financial Services, I am responsible  
10           for directing and administrating the treasury and cash management functions for Sierra  
11           Southwest. In addition, under agreements that Sierra Southwest has with Arizona  
12           Electric Power Cooperative, Inc. ("AEPCO") and Southwest Transmission  
13           Cooperative, Inc. ("SWTC"), I am also responsible for the same functions, as well as  
14           rate design and implementation for these two cooperatives.

15   **Q.     Please briefly summarize your educational and professional background.**

16   A.     I graduated in 1974 from Western State College, Gunnison, Colorado, with a Bachelor  
17           of Arts Degree specializing in Accounting and Business Administration. In June 1974,  
18           I was employed by Colorado-Ute Electric Association and worked there for 17 years in  
19           various positions in the areas of ratemaking, budgeting, financial forecasting and power  
20           requirements studies. In May 1992, I joined AEPCO as a Rates Administrator with  
21           principal responsibilities and duties, including the preparation of rate filings, the design

1 of rate structures and rate analysis studies. In 1993, I was promoted to the position of  
2 Manager of Financial Services and in August 2001, as a result of the restructuring of  
3 AEPCO into three separate cooperatives, I was employed in that same position by  
4 Sierra Southwest. I have testified as an expert witness before the Public Utilities  
5 Commission of the State of Colorado, the United States Bankruptcy Court in Denver,  
6 Colorado and the Arizona Corporation Commission in connection with various  
7 proceedings involving rate cases.

8 **Q. What is the purpose of your testimony?**

9 A. I will testify in support of SWTC's Application for a general rate filing. My testimony  
10 is primarily directed to the financial Schedules A-H which were prepared pursuant to  
11 the requirements of A.A.C. R14-2-103 and are filed in support of the Application.

12 **Q. Mr. Pierson, before discussing those schedules, please summarize SWTC's**  
13 **reasons for filing this rate case.**

14 A. Although we have several reasons, the primary reasons are to (1) request approval to  
15 implement SWTC's revised depreciation rates as discussed by Mr. Scott in his  
16 testimony and (2) revise rates to incorporate the inclusion of revenues associated  
17 with a new 205 MW Point-to-Point transmission agreement with AEPCO. Because a  
18 rate case is required to implement the depreciation changes discussed by Mr. Scott,  
19 we also performed a broader revenue requirements study to take into account  
20 changes in other expenses and revenues in the calendar 2011 test year.



1 Q. Please summarize SWTC's requests.

2 A. SWTC is asking that the Commission approve a revenue decrease of \$12.8 million,  
3 which translates to an overall 28.98% decrease in revenue requirements. These rates  
4 are based upon the rate design principles that were used in our last rate proceeding  
5 (Docket No. E-04100A-09-0496, Decision No. 72030). Also, SWTC is requesting  
6 that the Commission approve revised depreciation rates, as summarized by  
7 Mr. Scott, and a Transmission Revenue Adjustor, which will be discussed later in my  
8 testimony.

9 Q. Please describe the Schedules.

10 A. They are a multi-page exhibit containing Schedules A-H (the "Schedules") as described  
11 in R14-2-103.B. They are divided into the following categories:

<u>Schedule Category</u>	<u>Section Tab</u>
Summary Schedules	A
Rate Base Schedules	B
Test Year Income Statements	C
Cost of Capital Schedules	D
Financial Statements and Statistical Schedules	E
Projections and Forecast Schedules	F
Cost of Service Analysis Schedules	G
Effect of Proposed Tariff Schedules	H

21 Q. Please describe Section A.

22 A. Section A contains the summary schedules. Schedule A-1 shows the computation of  
23 the decrease in gross revenue requirements which result from the development of the  
24 financial schedules. Based on the test year adjusted operating income (margins) of

1 approximately \$22 million, we are requesting an overall decrease in revenues from  
2 SWTC Network and Point-to-Point service customers in the amount of approximately  
3 \$12.8 million. To accomplish that, we request (1) the existing Network Services Rate  
4 for transmission service be changed from a monthly revenue requirement of \$2,187,176  
5 to \$1,570,730; (2) the existing Firm and Non-Firm Point-to-Point Services Rate be  
6 changed from \$3.608 per kW month to \$2.558 per kW month; and (3) the existing  
7 System Control & Load Dispatching Rate be changed from \$0.245 per kW month to  
8 \$0.173 per kW month. The \$12.8 million is a decrease of 28.98% compared to the  
9 revenues that would be generated as adjusted by present rates and, based upon a test  
10 period adjusted rate base of approximately \$99 million, produces a rate of return of  
11 9.34%.

12 Schedule A-2 summarizes the results of operations for the 12 months ending  
13 December 31, 2009, 2010 and 2011, as well as the adjusted test year with present rates  
14 and with proposed rates. On a test year adjusted basis, the column entitled "Proj. Year  
15 Present Rates" shows SWTC had a net margin of approximately \$17.1 million, a TIER  
16 of 4.42 and a DSCR of 2.63. Proposed Rates would produce a net margin of about  
17 \$4.4 million, a TIER of 1.88 and a DSCR of 1.35. Schedule A-3 summarizes SWTC's  
18 capital structure and capitalization ratios for the years ending December 31, 2009 and  
19 2010, as well as the test year and projected year. Margins and equities were 11.02% at  
20 the end of 2011 and 13.93% at the end of the projected year. Schedule A-4 provides  
21 data concerning construction expenditures, net plant additions and gross utility plant in  
22 service. Schedule A-5 summarizes SWTC changes in financial position over various  
23 periods.

1     **Q.     Please describe Section B of the Schedules.**

2     A.     Section B contains supporting rate base schedules. Schedule B-1 summarizes the  
3             components of the original cost rate base of approximately \$99 million, as of  
4             December 31, 2011. It includes gross utility plant in service of about \$176 million,  
5             accumulated depreciation and amortization of more than \$80 million and allowances  
6             for working capital of about \$3 million. Four adjustments were made to the original  
7             cost rate base for the test year (Schedules B-2 and E-5, pages 3-4). SWTC made  
8             adjustments to Utility Plant to reclassify acquisition adjustments, as well as to  
9             remove plant held for future use and retirement work in progress, and also made an  
10            adjustment to accumulated depreciation to reflect the new proposed depreciation  
11            rates. Schedules B-3 and B-4, concerning reconstructed cost new less depreciation  
12            ("RCND") rate base, have not been completed. As a not-for-profit cooperative,  
13            SWTC stipulates to the use of its original cost rate base as its fair value rate base.

14           Schedule B-5, page 1, provides the computation of working capital by components,  
15           which sum to a total of about \$3 million. That schedule's remaining pages show the  
16           calculation of the different components. Schedule B-5, page 2, concerning the  
17           calculation of cash working capital, has not been completed. Due to the considerable  
18           time and expense of preparing a lead/lag study, SWTC agrees to the use of a zero  
19           value for its cash working capital. SWTC is also not asking for prepayments to be  
20           included in the computation of rate base as shown on Schedule B-5, page 4, because  
21           of the position Staff took on this issue in previous rate cases.

1     **Q.     Please describe Section C of the Schedules.**

2     A.     Section C contains the adjusted test year income statements and the supporting  
3           schedules to the income statements. Schedule C-1 provides the actual income  
4           statement and the as-adjusted income statement for the test year. Pages 1 and 2 of  
5           Schedule C-1 provide per books and reclassified income statements for the test year.  
6           The first column displays test year revenues and expenses, i.e., the 12 months ending  
7           December 31, 2011. As noted on Schedule C-1, page 2, SWTC had actual operating  
8           margins of approximately \$5.4 million and non-operating income of just over  
9           \$300,000 that, together, produce a net margin of approximately \$5.7 million. The  
10          second column states reclassification adjustments that are made to the test period  
11          which have a zero effect on net margins. Column 3 of Schedule C-1, pages 1 and 2,  
12          shows the income statement with these reclassifications. Pages 3 and 4 then set forth  
13          the SWTC reclassified income statement and the effects of pro forma adjustments to  
14          that income statement. The first column shows the reclassified test year income  
15          statement with net margins of approximately \$5.7 million. The second column  
16          displays adjustments to reflect changes in revenues and/or expenses so as to  
17          normalize or annualize revenues and expenses in the test period. The third column  
18          shows the adjusted net margin of about \$17.1 million.

19          Schedule C-2 provides detail on the reclassification and pro forma adjustments to  
20          revenues and expenses. They are as follows:

1        Reclassification Adjustments – Schedule C-2, Pages 1 and 2:

2            1.        AEPCO Revenue Reclassification – This adjustment reclassifies the ancillary  
3        services revenues that SWTC collects from various Point-to-Point and Network  
4        transmission customers as credits against the operating expenses that SWTC paid to  
5        AEPCO for those services during the test period. These revenues and charges are a  
6        pass-through, at cost, of ancillary services provided by AEPCO to those customers.  
7        Therefore, SWTC has removed them from its cost of service. The net effect of this  
8        reclassification on net margins is zero.

9            2.        Property Tax Reclassification – This adjustment reclassifies property taxes,  
10       which are recorded in various operation and maintenance expense categories according  
11       to Rural Utilities Service (“RUS”) accounting procedures, so that these expenses can be  
12       shown separately for ratemaking purposes. The net effect of this reclassification also is  
13       zero.

14        Pro Forma Adjustments – Schedule C-2, Pages 3 through 8:

15           1.        Electric District 2 Contract Adjustment – This adjustment annualizes the test  
16       year effect of the expiration of AEPCO’s 8 MW sales contract to the Electrical  
17       District 2 (“ED2”) that will occur on September 30, 2012. As a result, AEPCO will  
18       no longer purchase from SWTC the Point-to-Point transmission service which was  
19       needed to wheel the power purchased by ED2 under this contract. Therefore, these  
20       revenues have been removed from the test period. The effect of this adjustment  
21       reduces net margins by about \$370,000.

22           2.        AEPCO SRSG Point-to-Point Contract Adjustment – AEPCO intends to enter  
23       into a 205 MW Point-to-Point contract with SWTC to provide the necessary wheeling

1 paths to meet AEPCO's Southwest Reserve Sharing Group ("SRSG") obligations. This  
2 service will start at the same time new rates take effect in both the AEPCO and SWTC  
3 rate dockets. This adjustment annualizes test year revenues based upon SWTC's  
4 existing Point-to-Point tariff and the Ancillary Services Schedule 1 – System Control &  
5 Load Dispatching tariff rates. The effect of this new contract increases net margins by  
6 about \$9.5 million.

7 3. Central Arizona Water Conservation District ("CAWCD") Adjustment – This  
8 adjustment annualizes the revenues associated with Ancillary Services Schedule 1 –  
9 System Control & Load Dispatching service to CAWCD. This adjustment increases  
10 net margins by \$108,000.

11 4. CAWCD Non-recurring Point-to-Point Revenue Adjustment – This adjustment  
12 removes test year revenues received from CAWCD for non-firm transmission service  
13 that are non-recurring. This adjustment decreases net margins by about \$560,000.

14 5. AEPCO N-1 Point-to-Point Revenue Adjustment – This adjustment annualizes  
15 test year revenues associated with AEPCO's N-1 Point-to-Point service agreements.  
16 Prior to 2011, AEPCO had contracts with SWTC in the aggregate amount of 48 MW  
17 for Point-to-Point service. As explained previously in the ED2 Sales Contract  
18 Adjustment discussion, 8 MW of this 48 MW Point-to-Point service will end with the  
19 termination of the ED2 contract this September. However, on January 1, 2011,  
20 AEPCO entered into an additional 50 MW of Point-to-Point service to provide the  
21 necessary wheeling paths to accommodate an N-1 event on SWTC's transmission  
22 system. On January 1, 2012, AEPCO consolidated these 40 MW and 50 MW contracts  
23 with an additional 20 MWs of required service to establish a new N-1 contract of  
24 110 MW of Point-to-Point service. SWTC has included a pro forma adjustment to

1 reflect this additional \$925,000 of increased wheeling revenue for the additional  
2 20 MW which was not reflected in test period revenues. The effect of this adjustment  
3 increases net margins by that amount.

4 6. Member Un-designation Point-to-Point Revenue Adjustment – During its June  
5 2012 Board Meeting, the Directors of SWTC authorized management to amend, subject  
6 to RUS approval, the transmission service agreements with each of AEPCO's partial-  
7 requirements members to allow for the un-designation of delivery points from Network  
8 service. These amendments were authorized to conform SWTC transmission service  
9 requirements more closely to Federal Energy Regulatory Commission ("FERC") Order  
10 888 requirements that Network service agreements and Point-to-Point service  
11 agreements may not have a common delivery point. As a result of these changes to the  
12 agreements, Mohave Electric Cooperative ("MEC") will un-designate a delivery point  
13 and enter into a 9 MW Point-to-Point agreement with SWTC. In addition, SWTC  
14 proposes to terminate its 40 MW Point-to-Point agreement with Sulphur Springs Valley  
15 Electric Cooperative ("SSVEC") and is meeting with SSVEC on the un-designation of  
16 delivery points. The net effect of these two contract revisions decreases net margins by  
17 about \$1.4 million.

18 7. MEC Chemstar Wheeling Revenue Adjustment – This adjustment removes the  
19 transmission revenue credits associated with the Peak Load Shedding agreement  
20 between AEPCO, MEC and Chemstar, which terminated on October 31, 2011. This  
21 adjustment increases net margins by about \$11,000.

22 8. Labor Expense Adjustment – This adjustment annualizes labor expense and  
23 associated payroll taxes and benefits to reflect reductions in staffing levels and wage  
24 increases that occurred during the test period, as well as known and measurable wage

1 increases that are taking effect in 2012. In 2011, AEPCO and SWTC reduced staffing  
2 levels from 302 employees to the current level of 261. This adjustment reflects  
3 SWTC's portion of these staffing reductions and results in a \$1.6 million increase to net  
4 margins.

5 9. Sandario Transmission Line Designation Adjustment – This adjustment  
6 removes direct assignment facility revenues associated with the Sandario Line, which  
7 has been re-designated as a system facility rather than as a direct assignment facility.  
8 The effect of this adjustment decreases net margins by about \$263,000.

9 10. Rate Case Expense Amortization Adjustment – This adjustment assumes legal  
10 costs and expenses associated with the rate Application of \$240,000 and amortizes  
11 those expenses over a three-year period. The effect of this adjustment results in a  
12 decrease in net margins of \$80,000.

13 11. SWTC Cost Cutting Program Adjustment – This adjustment reflects the impact  
14 of certain non-payroll-related cost cutting measures instituted by SWTC during 2011.  
15 The effect of this adjustment increases net margins by approximately \$274,000.

16 12. Depreciation Adjustment – This adjustment reflects the revised depreciation  
17 rates that are proposed by SWTC and which are discussed in Mr. Scott's testimony.  
18 The adjustment is predicated on revised useful life estimates for classes of transmission  
19 plant ranging from 52 to 60 years. The revised depreciation rates decrease depreciation  
20 expense by approximately \$1.4 million and increase net margins by the same amount.

21 13. CUT Debt Refinancing – On February 1, 2012, AEPCO refinanced its  
22 Cooperative Utility Trust ("CUT") Certificate bearing an interest rate of 7.74%. Under  
23 the terms of the Assumption and Indemnity Agreement, as amended, SWTC is entitled  
24 to about 33% of the savings associated with the refinancing. SWTC has, therefore,



1 made an adjustment to test year expenses to reflect SWTC's portion of the annual  
2 interest savings associated with the refinancing. This increases net margins by  
3 \$318,000.

4 14. Interest Expense Adjustment – This adjustment annualizes interest expense  
5 based upon debt balances and interest rates at the end of the test year (adjusted for the  
6 CUT Certificate refinancing) and decreases interest expense by about \$21,000. Net  
7 margins are increased by the same amount. In addition, SWTC has adjusted the  
8 principal payments for the test period to reflect the principal payments due within the  
9 next year. This increases principal payments by about \$181,000.

10 As indicated on page 8 of Schedule C-2, these pro forma adjustments to expenses and  
11 revenues result in an increase in net margins of about \$11.5 million.

12 Finally, Schedule C-3, concerning the computation of the gross revenue conversion  
13 factor, is not applicable, because SWTC is a not-for-profit cooperative and does not pay  
14 income taxes.

15 **Q. Please describe Section D of the Schedules.**

16 A. The D Schedules contain information on SWTC's cost of capital for the 12 months  
17 ended December 31, 2009, 2010 and 2011 and the projected 12 months ended  
18 December 31, 2012. Schedule D-1 sets forth the computed cost of capital as of  
19 December 31, 2011 for the test year, as well as the projected year ending December 31,  
20 2012. Test year invested debt capital amounted to about \$116 million, with a  
21 composite cost rate of 4.56%. Schedule D-2 shows long-term and short-term debt

1 balances by lender that comprise the total debt, the interest rates associated with the  
2 debt balances and the computation of the composite cost rate for three actual years and  
3 the projected year. Schedules D-3 and D-4, on cost of preferred and common stock, are  
4 not applicable to SWTC, because it is a member-owned, not-for-profit cooperative.

5 **Q. Please describe Section E of the Schedules.**

6 A. Section E contains financial statements and statistical schedules for the 12 months  
7 ended December 31, 2009, 2010 and 2011. Schedule E-1 provides comparative  
8 balance sheets and Schedule E-2 shows comparative income statements. Schedule E-3  
9 provides a comparative statement of changes in financial position and Schedule E-4  
10 reflects changes in equity. Schedule E-5 contains detail on utility plant additions during  
11 the test year and the balances as of December 31, 2010 and 2011, along with pro forma  
12 adjustments. Schedule E-6 is not applicable because, as a not-for-profit cooperative,  
13 SWTC has no stock. Schedule E-7 provides SWTC operating statistics, while  
14 Schedule E-8 lists taxes charged to operations. Attached to my testimony as  
15 Exhibit GEP-1 are the Consolidated Financial Statements, which include the  
16 Independent Auditors' Report to the SWTC Board dated April 23, 2012. It contains the  
17 information required by Schedule E-9.

18 **Q. Please describe Section F of the Schedules.**

19 A. Section F contains various projections and forecast schedules. Schedule F-4 discusses  
20 certain assumptions used in developing the projections contained in the previous  
21 F schedules.

1     **Q.     Please describe Section G of the Schedules.**

2     A.     Schedule G-1 is a cost of service summary for the adjusted test year based upon present  
3           rates. Present rates produced about \$22 million in operating margins. Schedule G-2  
4           provides the cost of service summary for the adjusted test year based upon the proposed  
5           rates. They would produce operating margins of approximately \$9.2 million and a  
6           9.34% rate of return on rate base. Schedule G-2A sets forth the computation of the  
7           proposed rates for transmission services. These rates are consistent with FERC  
8           Order 888, which requires that a transmitting utility offer firm or non-firm Point-to-  
9           Point and firm Network service transmission on a non-discriminatory open access basis.  
10          Under Section 211 of the Federal Power Act, customers can seek transmission services  
11          from transmitting utilities like SWTC and FERC requires these utilities to provide  
12          comparable access to the national grid.

13         Schedule G-2A, page 1, provides the derivation of SWTC's annual transmission  
14         revenue requirement, which equals total operating expenses, less other revenues, plus  
15         margin requirements. Schedule G-2A, page 2, is a summary of the proposed  
16         transmission service rates for the Point-to-Point and Network services offered by  
17         SWTC. The schedule also lists the proposed rates for mandatory and optional ancillary  
18         services.

19         Page 3 of Schedule G-2A shows the calculation of the Point-to-Point rate, which results  
20         from dividing the annual transmission revenue requirement by the product of the  
21         coincidental peak demand multiplied by 12. The Network services revenue  
22         requirement is calculated by subtracting the Point-to-Point revenues from the annual

1 transmission revenue requirement. The Network service proposed rate set forth on  
2 Schedule G-2A, page 2, is then obtained by dividing the Network services revenue  
3 requirement by 12 months and each Network services customer is billed each month by  
4 multiplying the Network service proposed rate by their respective load ratio share  
5 percentage. The load ratio share percentage is obtained by dividing the Network  
6 services rolling 12-month average transmission demand by the total of all Network  
7 service customers' rolling 12-month average transmission demand. Schedule G-2A,  
8 page 4, adjusts the calculation in G-2A, page 3, for the impact of a contract between  
9 SWTC and MEC, which insulates that member cooperative from certain costs  
10 associated with system improvements that do not directly benefit MEC.

11 Schedule G-2A, page 5, shows the calculation of the mandatory Ancillary Services  
12 Schedule 1 – System Control & Load Dispatching rate. This rate is arrived at by  
13 dividing certain costs associated with providing these services by the quantity of  
14 generating capacity through which these services are provided. Annual numbers are  
15 divided by 12 to determine monthly values. Schedule G-2A, page 6, calculates the  
16 proposed mandatory Schedule 2 ancillary service rate for reactive power (VAR)  
17 support/voltage control. It is based upon costs provided by AEPCO, which appear on  
18 G-2A, pages 7 through 9. Schedule G-2A, page 10, shows the derivation of the  
19 proposed rate for the optional Schedule 4 ancillary service (Energy Imbalance) which is  
20 also based upon cost information provided by AEPCO.

21 Schedule G-2A, page 11 (parts 1 and 2), calculates the revenues that SWTC should  
22 obtain from each of its contracts with the member distribution cooperatives based on

1 the proposed rates. Schedule G-2A, page 12 (parts 1 and 2), provides this information  
2 based on existing rates, which are presented in Schedule G-2A, page 13.  
3 Schedule G-2A, page 14, calculates the revenues to be collected from each customer of  
4 SWTC for providing Ancillary Services Schedule 1 – System Control & Load  
5 Dispatching services. This amount is used to reduce the amount of revenues that  
6 SWTC collects through transmission rates, so that rates are designed to meet the  
7 targeted level of revenue requirements.

8 **Q. Please describe Section H of the Schedules.**

9 A. The H Schedules show the effect of the proposed rate tariff schedules on the revenues  
10 generated by sales to SWTC's Network and Point-to-Point customers. Schedule H-1  
11 summarizes the revenues generated by present rates and the proposed rates for the test  
12 year ending December 31, 2011. This schedule shows that present rates would generate  
13 revenues from sales of transmission (including mandatory Schedule 1 services) to  
14 Network and Point-to-Point customers of about \$44 million and that the proposed rates,  
15 instead, would generate revenues of about \$31 million. Thus, the proposed rates are  
16 expected to produce a decrease in revenues of about \$12.8 million compared to the  
17 present rates. Schedule H-2, page 1, compares revenues generated by the present and  
18 proposed rates for each of the Class A Members, as well as the other Network services  
19 customers. Pages 2 through 12 of Schedule H-2 analyze the revenues generated on a  
20 monthly basis from each Network services customer. Pages 13 through 15 provide  
21 summaries of this information. Pages 16 and 17 of Schedule H-2 compare revenues  
22 generated by present and proposed rates for Point-to-Point services. Schedule H-3

1 shows the changes in representative rate schedules. Schedules H-4 and H-5 are not  
2 applicable to SWTC, because the cooperative does not provide retail electric service.

3 **Q. Is SWTC proposing any changes to the cost allocation and rate design approaches**  
4 **which were approved by the Commission in SWTC's prior rate case?**

5 A. No. SWTC is not recommending any changes to the methods used to complete  
6 Schedules G and H in prior rate cases, nor is it suggesting any change to the rate design  
7 which has been used since SWTC commenced operations in 2001. We have updated  
8 the information in the schedules presented in this rate case to reflect the updated cost  
9 information and billing determinants discussed previously in my testimony and  
10 presented in Schedules A through H.

11 **Q. Please summarize the rates that SWTC requests the Commission approve.**

12 A. The primary rates that SWTC requests approval of are (a) the Network Services Rate's  
13 monthly revenue requirement of \$1,570,730; (b) the Firm and Non-Firm Point-to-Point  
14 Services Rate of a maximum of \$2.558/kW month; and (c) a System Control & Load  
15 Dispatching Rate of \$0.173/kW month.

16 **Q. Mr. Pierson, please discuss the Transmission Revenue Adjustor ("TRA")**  
17 **proposed by SWTC.**

18 A. Mr. Scott's testimony generally describes the proposed TRA and SWTC's reasons for  
19 requesting it. Attached to this testimony as Exhibit GEP-2 is an illustration  
20 demonstrating how the adjustor would work in the event that a new 25 MW Point-to-  
21 Point service agreement of more than a year duration is entered into after this rate

1 case and, conversely, how rates would adjust if an existing 25 MW Point-to-Point  
2 service agreement were terminated between rate cases.

3 Lines 1-10 of GEP-2 show how both the Point-to-Point and Network service rates  
4 are calculated in a rate case, using SWTC's proposed revenue requirement in this  
5 docket as an example. As shown on Lines 4 and 10, the Point-to-Point rate is  
6 \$2.558/kW month and the Network monthly revenue requirement is \$1,570,730.  
7 Under the first hypothetical at lines 12-18, if SWTC were to add a 25 MW Point-to-  
8 Point contract, then the Network service monthly revenue requirement would be  
9 reduced to \$1,506,780. However, the total annual revenue requirement authorized by  
10 the Commission remains the same as in the rate case (approximately \$29 million). The  
11 additional \$767,400 of Point-to-Point revenue decreases the portion of that total  
12 revenue requirement to be collected from Network service customers. Conversely,  
13 lines 20-26 demonstrate how the TRA would work if SWTC were to lose a 25 MW  
14 Point-to-Point contract. Under that scenario, the Network monthly revenue requirement  
15 adjusts to \$1,634,680. However, as in the first example, the total authorized annual  
16 revenue requirement remains constant at about \$29 million.

17 **Q. Do you have precise tariff language to propose for the TRA at this time?**

18 A. No. We only quite recently raised the concept with the Utilities Division Staff and are  
19 in the process of working on the details of the proposal. We anticipate filing in this  
20 docket a more detailed adjustor proposal by the end of October.

1    **Q.    Finally, are there any other transmission issues that you would like to bring to the**  
2           **Commission's attention?**

3    A.    Just one.  The Western Area Power Administration has filed notices of proposed  
4           transmission rates for its Parker Davis and Pacific Northwest-Pacific Southwest Intertie  
5           Projects.  Initial estimates are that the increased rates could add approximately  
6           \$675,000 in wheeling expense to SWTC on an annual basis.  However, the proposed  
7           rates are still in the comment phase and, therefore, have not been included as a pro  
8           forma adjustment to revenue requirements in this rate Application.

9    **Q.    Does this conclude your direct testimony?**

10   A.    Yes, it does.



# Exhibit GEP-1

Report of Independent Auditors  
and Financial Statements for

Southwest Transmission  
Cooperative, Inc.

December 31, 2011 and 2010

**MOSS ADAMS** LLP

*Accountants, Attorneys, and Real Estate Brokers*

*Account. Agilty. Answers.*

## CONTENTS

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	PAGE
REPORT OF INDEPENDENT AUDITORS	1
FINANCIAL STATEMENTS	
Balance sheets	2-3
Statements of revenues and expenses and unallocated accumulated margins (losses)	4
Statements of cash flows	5
Notes to financial statements	6-19
REPORT OF INDEPENDENT AUDITORS ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH <i>GOVERNMENT AUDITING STANDARDS</i>	20-21

**MOSS ADAMS** LLP  
Certified Public Accountants | Business Consultants

## REPORT OF INDEPENDENT AUDITORS

To the Board of Directors  
Southwest Transmission Cooperative, Inc.

We have audited the accompanying balance sheets of Southwest Transmission Cooperative, Inc. (the Cooperative) as of December 31, 2011 and 2010 and the related statements of revenues and expenses and unallocated accumulated losses and cash flows for the years then ended. These financial statements are the responsibility of the Cooperative's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Cooperative's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Cooperative as of December 31, 2011 and 2010 and the results of its operations and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued a report dated April 23, 2012 on our consideration of the Cooperative's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

*Moss Adams LLP*

Portland, Oregon  
April 23, 2012

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**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**BALANCE SHEETS**

		ASSETS	
		December 31,	
		2011	2010
<b>UTILITY PLANT</b>			
Plant in service		\$ 176,901,055	\$ 176,999,314
Construction work in progress		8,948,097	6,599,089
Total utility plant		185,849,152	183,598,403
Less accumulated depreciation		81,751,925	76,810,840
Utility plant, net		104,097,227	106,787,563
<b>INVESTMENTS</b>			
Restricted held to maturity		2,048,005	1,333,505
Other		1,212,239	1,201,826
Total investments		3,260,244	2,535,331
<b>CURRENT ASSETS</b>			
Cash and cash equivalents		12,269,545	7,191,267
Accounts receivable		3,365,303	3,370,223
Materials and supplies inventory		4,152,990	2,176,168
Prepayments and other current assets		787,189	826,399
Total current assets		20,575,027	13,564,057
DEFERRED DEBITS AND REGULATORY ASSETS		3,628,128	3,975,790
<b>TOTAL ASSETS</b>		<b>\$ 131,560,626</b>	<b>\$ 126,862,741</b>

**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**BALANCE SHEETS**

**MEMBERSHIP CAPITAL AND LIABILITIES**

	December 31,	
	2011	2010
<b>MEMBERSHIP CAPITAL</b>		
Membership fees	\$ 900	\$ 900
Patronage capital	9,438,264	9,438,264
Unallocated accumulated margins (losses)	5,003,242	(815,161)
<b>Total membership capital</b>	<b>14,442,406</b>	<b>8,624,003</b>
<b>LONG-TERM DEBT</b>		
Federal Financing Bank	92,713,826	95,861,250
Cooperative Utility Trust	-	7,300,860
Solid Waste Disposal Revenue bonds	6,189,655	6,515,426
Cooperative Finance Corporation	6,594,793	140,987
<b>Total long-term debt</b>	<b>105,498,274</b>	<b>109,818,523</b>
<b>CURRENT LIABILITIES</b>		
Member advances	349,347	332,938
Current maturities of long-term debt	6,984,695	3,949,503
Accounts payable	1,091,726	1,278,605
Accrued property and business taxes	1,009,993	899,943
Accrued interest	1,428,399	1,468,848
Other	755,786	490,378
<b>Total current liabilities</b>	<b>11,619,946</b>	<b>8,420,215</b>
<b>TOTAL MEMBERSHIP CAPITAL AND LIABILITIES</b>	<b>\$ 131,560,626</b>	<b>\$ 126,862,741</b>

**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**STATEMENTS OF REVENUES AND EXPENSES AND**  
**UNALLOCATED ACCUMULATED MARGINS (LOSSES)**

	Years Ended December 31,	
	2011	2010
<b>OPERATING REVENUES</b>		
Sales of electric transmission		
Members		
Class A - Firm	\$ 26,996,630	\$ 20,929,368
Class B - Firm	4,280,718	6,082,597
Class B - Nonfirm	124	288
Nonmembers	2,865,472	2,035,729
Sales and ancillary services		
Members		
Class A	3,574,011	3,676,882
Class B	293,297	513,513
Nonmembers	1,307,551	1,304,225
Total operating revenues	<u>39,317,803</u>	<u>34,542,602</u>
<b>OPERATING EXPENSES</b>		
Transmission operation	3,130,705	3,304,898
Depreciation and amortization	5,384,647	5,430,170
Administration and general	4,265,281	4,691,917
Property and other taxes	2,022,230	1,781,220
Transmission system control	3,545,158	4,015,618
Transmission maintenance	4,823,017	4,991,987
Wheeling and ancillary charges	5,127,127	5,335,501
Total operating expenses	<u>28,298,165</u>	<u>29,551,311</u>
<b>OPERATING MARGIN</b>	11,019,638	4,991,291
Interest and interest related expenses, net	(5,507,886)	(5,546,620)
Other, net	306,651	(259,832)
<b>NET MARGIN (LOSS)</b>	5,818,403	(815,161)
<b>UNALLOCATED ACCUMULATED MARGINS (LOSSES),</b> beginning of year	(815,161)	40,486
<b>PATRONAGE CAPITAL ALLOCATION</b>	-	(40,486)
<b>UNALLOCATED ACCUMULATED MARGINS (LOSSES),</b> end of year	<u>\$ 5,003,242</u>	<u>\$ (815,161)</u>



**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**STATEMENTS OF CASH FLOWS**

	Years Ended December 31,	
	2011	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Net margin (loss)	\$ 5,818,403	\$ (815,161)
Adjustments to reconcile net margin (loss) to net cash from operating activities		
Depreciation and amortization of plant in service	5,384,647	5,430,170
Changes in assets and liabilities		
Accounts receivable	4,920	(165,792)
Materials and supplies inventory	(1,976,822)	(700)
Deferred debits	347,662	268,493
Accrued property and business taxes	110,050	50,129
Accounts payable	(186,879)	(299,922)
Accrued interest	(40,449)	1,128,861
Other, net	304,618	(1,187,644)
Net cash from operating activities	9,766,150	4,408,434
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Construction expenditures, net	(2,694,311)	(1,614,371)
Investments	(724,913)	(68,587)
Net cash from investing activities	(3,419,224)	(1,682,958)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Member advances, net	16,409	(186,728)
Payments on long-term debt	(7,293,557)	(5,064,133)
Proceeds from long-term debt	6,008,500	6,683,000
Net cash from financing activities	(1,268,648)	1,432,139
<b>CHANGE IN CASH AND CASH EQUIVALENTS</b>	5,078,278	4,157,615
<b>CASH AND CASH EQUIVALENTS, beginning of year</b>	7,191,267	3,033,652
<b>CASH AND CASH EQUIVALENTS, end of year</b>	<u>\$ 12,269,545</u>	<u>\$ 7,191,267</u>
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION</b>		
Cash paid for interest, net of amount capitalized	<u>\$ 5,375,928</u>	<u>\$ 4,211,996</u>

See accompanying notes.

## **SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

### **NOTES TO FINANCIAL STATEMENTS**

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#### **Note 1 – Organization**

Southwest Transmission Cooperative, Inc. (the Cooperative or SWTC) is organized under Arizona law as a nonprofit rural electric transmission cooperative, which provides electric transmission and ancillary services to its customers. The Cooperative was organized with two classes of members. Class A members consist of nonprofit electric cooperative or nonprofit membership corporations, which are electric utilities that are or have been beneficiaries of the Rural Electrification Act of 1936 and have or will have agreements wherein their power and associated energy are delivered using transmission and related facilities owned by the Cooperative and/or transmission rights in third-party systems controlled by the Cooperative; and that have each joined with the other Class A members in the Cooperative's operations in order to share the benefits and costs of ownership of an entity engaged in providing transmission services for the benefit of its members. There are currently six Class A members. Class B members consist of generation and transmission electric cooperatives organized under Arizona law and other electric utilities which currently have, or will have, agreements with the Cooperative whereby transmission services are purchased from the Cooperative. There are currently two Class B members.

#### **Note 2 – Summary of Significant Accounting Policies**

**System of accounts** – The Cooperative maintains its accounts in accordance with policies and procedures as prescribed by the Rural Utilities Service (RUS) in conformity with the Uniform System of Accounts. The Cooperative's accounting policies conform to accounting principles generally accepted in the United States of America as applied in the case of regulated public utilities and are in accordance with the accounting requirements and rate-making practices of RUS and the Arizona Corporation Commission (ACC), the regulatory authorities having jurisdiction.

**Accounting for the effects of regulation** – Due to the regulation of its rates by the ACC, the Cooperative prepares its financial statements in accordance with Regulated Operations. This accounting requires a cost-based, regulated enterprise to recognize revenues and expenses in the time periods when the revenues and expenses are included in rates. This may result in regulatory assets and liabilities until such time that the related revenues and expenses are included in rates (see Note 5).

**Utility plant** – Utility plant, consisting primarily of transmission facilities, is stated at historical cost and includes the costs of outside contractors, direct labor and materials, allocable overhead and interest charged to construction.

In accordance with the Uniform System of Accounts, the Cooperative capitalizes the interest costs associated with the borrowing of funds used to finance construction work in progress (CWIP). Interest income from construction funds held in trust, if any, is credited to CWIP. Interest costs capitalized on construction projects was approximately \$20,000 and \$21,000 in 2011 and 2010, respectively.

**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**NOTES TO FINANCIAL STATEMENTS**

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**Note 2 – Summary of Significant Accounting Policies (continued)**

Depreciation is computed on the straight-line basis over estimated useful lives of depreciable property in accordance with rates prescribed by RUS, averaging 3.00% and 3.10% for 2011 and 2010, respectively. Depreciation expense was approximately \$5,385,000 and \$5,430,000 for the years ended December 31, 2011 and 2010, respectively. Minor replacements and repairs are charged to expense as incurred. Retirements of utility plant, together with the cost of removal, less salvage, are charged to accumulated depreciation.

The Cooperative assesses its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the fair value is less than the carrying amount of the asset, a loss is recognized for the difference. The Cooperative has not recorded losses resulting from impairment of its long-lived assets.

**Asset retirement obligation** – Accounting standards require the recognition of an Asset Retirement Obligation (ARO), measured at estimated fair value, for legal obligations related to decommissioning and restoration costs associated with the retirement of tangible long-lived assets in the period in which the liability is incurred. The initial capitalized asset retirement costs are depreciated over the life of the related asset, with accretion of the ARO liability classified as an operating expense. Management has determined that they do not have a significant asset retirement obligation.

**Investments** – The Cooperative accounts for its investments in accordance with accounting for certain investments in debt and equity securities. This accounting provides that the Cooperative classify investments in securities as either trading securities, held-to-maturity securities, or available-for-sale securities. At December 31, 2011 and 2010, all investment balances were classified as held-to-maturity securities and are therefore recorded at amortized cost (see Note 3).

A decline in the market value of held-to-maturity securities below cost that is deemed to be other-than-temporary results in a reduction in carrying amount to fair value. The impairment is charged to margins and a new cost basis for the security is established. To determine whether an impairment is other-than-temporary, the Cooperative considers whether it has the ability and intent to hold the investment until a market price recovery and considers whether evidence indicating the cost of the investment is recoverable outweighs evidence to the contrary. Evidence considered in this assessment includes the reasons for the impairment, the severity and duration of the impairment, changes in value subsequent to year end and forecasted performance of the investee. Management does not believe the investments are impaired as of December 31, 2011.

**Fair value of financial instruments** – Many of the Cooperative's financial instruments lack an available trading market as characterized by a willing buyer and willing seller engaged in an exchange transaction. The Cooperative's general practice and intent is to hold its financial instruments to maturity and not to engage in trading or sales activities. As a result, significant estimations using the best available information and present value calculations are used by the Cooperative for purpose of disclosure. For current financial instruments, the carrying amounts approximate fair value.

## **SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

### **NOTES TO FINANCIAL STATEMENTS**

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#### **Note 2 – Summary of Significant Accounting Policies (continued)**

**Cash equivalents** – The Cooperative considers all investments with an original maturity of 90 days or less to be cash equivalents. The Cooperative maintains its cash in bank accounts, which, at times, exceed federally insured limits and has not experienced any losses in such accounts.

**Smart Grid Investment Grant** – The Cooperative submitted an application to the U.S. Department of Energy (DOE) on behalf of itself and two of its member cooperatives for grant funds as authorized by section 405, Division A of the American Recovery and Reinvestment Act of 2009. DOE approved the grant application in the amount of \$32,244,485 to fund 50% of the costs to implement smart grid technology. The project start date for this grant was June 1, 2010 with project implementation not to exceed thirty-six months. Expenditures related to federal grant awards totaled \$8,685,498 and \$5,433,378 for the years ended December 31, 2011 and 2010, respectively, of which \$7,171,416 and \$4,228,448, respectively were incurred by sub-recipients. Grant funds are subject to audit by the DOE.

**Accounts receivable** – Receivables are recorded when invoices are issued and are written off when they are determined to be uncollectible (see Note 4). The allowance for doubtful accounts is estimated based on historical losses, review of specific problem accounts, the existing economic conditions in the industry and the financial stability of customers. Generally, accounts receivable are considered past due after 30 days. No allowance was deemed necessary at December 31, 2011 and 2010.

**Inventories** – Inventories, consisting of materials and supplies, are carried at average cost.

**Unamortized debt costs** – Costs incurred for the issuance or repricing of long-term debt are deferred and amortized over the life of the related debt (see Note 5).

**Deferred debits** – Deferred debits are recorded at cost and either: (1) amortized over their expected period of benefit or alternate period of time as may be mandated by ACC or other regulatory order, if different, or (2) eliminated upon determination of their ultimate disposition (see Note 5).

**Revenues** – Revenues are recognized as electric transmission or other services are provided.

**Use of estimates** – The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

**Subsequent events** – Accounting standards require disclosure of the date through which subsequent events have been evaluated, as well as whether the date is the date the financial statements were issued or the date the financial statements were available to be issued. The Cooperative has evaluated subsequent events through April 23, 2012, the date the financial statements were available to be issued.

**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**NOTES TO FINANCIAL STATEMENTS**

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**Note 3 - Investments**

Investments at December 31 consist of the following:

	<u>2011</u>	<u>2010</u>
Restricted term certificates	\$ 2,048,005	\$ 1,333,505
Investment in associated organization	1,075,000	1,000,000
Other	<u>137,239</u>	<u>201,826</u>
Total investments	<u>\$ 3,260,244</u>	<u>\$ 2,535,331</u>

**Restricted term certificates** - The Cooperative is a member of the National Rural Utilities Cooperative Finance Corporation (CFC), a not-for-profit cooperative financing institution. As a condition of membership, the Cooperative purchased \$1,333,505 in Subscription Capital Term Certificates (SCTCs), which bear interest at 5.00% per annum and have maturity dates ranging from 2070 to 2080. The fair value of these investments is not readily determinable; therefore, they are recorded at cost.

As a condition of the long-term debt due CFC (see Note 7), in 2011 the Cooperative purchased a Zero Term Certificate (ZTC) totaling \$714,500 bearing interest at 2.40% per annum and maturing in 2013.

The SCTCs and ZTC are unrated, uncollateralized debt securities of CFC.

**Investment in associated organizations** - The Cooperative is a member of Sierra Southwest Cooperative Services, Inc. (Sierra). The Cooperative's investment in Sierra is carried at cost (see Note 15).

In November 2011, the Cooperative invested \$75,000 in the capital of Grand Canyon State Electric Cooperative Association (GCSECA). The Cooperative's investment in GCSECA is accounted for under the cost method of accounting.

**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**NOTES TO FINANCIAL STATEMENTS**

**Note 4 – Accounts Receivable**

Accounts receivable at December 31 consist of the following:

	<u>2011</u>	<u>2010</u>
Electric transmission sales	\$ 3,248,849	\$ 2,704,856
Due from related party	52,243	321,613
Other	<u>64,211</u>	<u>343,754</u>
Total accounts receivable	<u>\$ 3,365,303</u>	<u>\$ 3,370,223</u>

**Electric transmission sales** – Electric transmission sales consist of sales to members and nonmembers under transmission service agreements (see Note 10) and are generally not collateralized.

**Note 5 – Deferred Debits and Regulatory Assets**

Deferred debits and regulatory assets at December 31 consist of the following:

	<u>2011</u>	<u>2010</u>
Regulatory assets	\$ (315,057)	\$ (315,057)
Unamortized debt costs	556,575	722,991
Preliminary survey and investigation and land rights	3,070,836	3,012,796
Software lease	<u>315,774</u>	<u>555,060</u>
Total deferred debits and regulatory assets	<u>\$ 3,628,128</u>	<u>\$ 3,975,790</u>

**Regulatory assets** – The ACC authorized the recovery of the regulatory assets through the imposition of a specific charge (see Note 2). The regulatory assets, pursuant to an order from the ACC, are being amortized as revenues related to the regulatory assets that are collected. The credit represents revenue remaining to be recognized related to the regulatory assets.

**Note 6 – Patronage Capital**

	<u>2011</u>	<u>2010</u>
January 1	\$ 9,438,264	\$ 9,397,778
Patronage capital allocation	<u>-</u>	<u>40,486</u>
December 31	<u>\$ 9,438,264</u>	<u>\$ 9,438,264</u>

## SOUTHWEST TRANSMISSION COOPERATIVE, INC.

### NOTES TO FINANCIAL STATEMENTS

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#### Note 6 – Patronage Capital (continued)

In accordance with the Cooperative's bylaws, the Cooperative is obligated to account on a patronage basis to all its members for all amounts received and receivable from the furnishing of electric energy transmission and other services to members in excess of the sum of:

- Operating costs and expenses, including interest on debt service, properly chargeable against the furnishing of electric energy transmission, and other services;
- Amounts required to offset any losses incurred during the current or any prior fiscal year; and
- Maintenance of reserves, if any.

All such excess amounts at the moment of receipt by the Cooperative are received with the understanding that they are furnished by the members as capital. RUS mortgage provisions require written approval of any declaration or payment of capital credits. These provisions restrict the payment of capital credits to 25% of the margins received by the Cooperative in the preceding year, unless total membership capital exceeds 40% of the total assets of the Cooperative. There were no retirements for 2011 and 2010.

#### Note 7 – Long-Term Debt

**Federal Financing Bank (FFB)** – This debt is payable at interest rates based on long-term obligations of the United States Government as determined on the date of advance. Interest rates on individual FFB notes ranged from 2.35% to 9.08% in 2011 and from 2.60% to 9.08% in 2010. Equal quarterly principal and interest installments on these obligations extend through 2035. The obligations are guaranteed by RUS. The Cooperative may prepay all outstanding notes by paying the principal amount plus either: 1) the difference between the outstanding principal balance of the loan being refinanced and the present value of the loan discounted at a rate equal to the then current cost of funds to the Department of the Treasury for obligations of comparable maturity; 2) 100% of the amount of interest for one year on the outstanding principal balance of the loan being refinanced multiplied by the ratio of a) number of quarterly payment dates remaining to maturity bears to b) number of quarterly payment dates between year 13 of the loan and the maturity date; or 3) present value of 100% of the amount of interest for one year on the outstanding principal balance of the loan.

**Cooperative Utility Trust** – The Cooperative issued a note, underlying a Certificate of Beneficial Interests (the Certificate), to a Cooperative Utility Trust. Principal payments on the note are due annually through 2018 and guaranteed by RUS. The interest rate on the note is 7.70%, paid semiannually. The note may be prepaid at any time after September 1, 2006 at 103.50% of the outstanding principal amount of the note on the date of prepayment, declining one half percent per year to 100% beginning September 1, 2013 and thereafter. This note was prepaid in full in February 2012 and the entire amount outstanding at December 31, 2011 is classified in 2012 maturities of long-term debt.

## **SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

### **NOTES TO FINANCIAL STATEMENTS**

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#### **Note 7 - Long-Term Debt (continued)**

**Solid Waste Disposal Revenue bonds** - Principal on these bonds is due in annual installments through 2024. Interest rates on the bonds are variable and subject to revision semiannually. The interest rate in effect at December 31, 2011 and 2010 was 1.00% and 1.24%, respectively. Interest is paid semiannually. These bonds are guaranteed by CFC and are not subject to optional redemption prior to maturity.

**Rural Utilities Service** - RUS has established a Cushion of Credit Payment Program, whereby borrowers may make advance payments on their RUS and FFB notes. These advance payments earn interest at the rate of 5.00% per annum. The advance payments, plus any accrued interest, can only be used for the payment of principal and interest on the notes. The Cooperative's participation in the Cushion of Credit Payment Program totaled \$4,119,806 and \$1,513,001 at December 31, 2011 and 2010, respectively, and is recorded as a reduction of the outstanding RUS and FFB long-term debt.

**Cooperative Finance Corporation** - The outstanding long-term debt is payable at a variable interest rate that is established monthly and effective on the first day of each month. The interest rate in effect at December 31, 2011 and 2010 was 3.20% and 4.95%, respectively. Quarterly principal and interest payments on this obligation extend through 2013. This obligation is guaranteed by RUS. The variable interest rate on the debt is convertible to a fixed rate. The fixed rate would be equal to the rate of interest offered by CFC at the time of the conversion request. The Cooperative may prepay fixed rate notes in whole or in part, subject to a prepayment premium prescribed by CFC.

During 2010, the Cooperative entered into a three-year secured note with CFC in the amount of \$48 million to provide front-end financing for its construction work plan projects. The interim financing will be repaid with draws from the Cooperative's RUS guaranteed FFB loans once the projects are completed. In addition, the Cooperative entered into a three-year unsecured equity note with CFC in the amount of \$6,859,200 to purchase equity term certificates associated with the interim financing draws. Upon repayment of the interim financing draws, the equity term certificates will be used to repay the unsecured equity financing. These notes mature in March 2013 and are payable at a variable long-term interest rates which were 3.20% and 3.00% at December 31, 2011, and 4.95% at December 31, 2010. As of December 31, 2011, the Cooperative has drawn \$5,000,000 from the first note and \$714,500 from the second note.



**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**NOTES TO FINANCIAL STATEMENTS**

**Note 7 – Long-Term Debt (continued)**

**Maturities of long-term debt** – Maturities of long-term debt for the next five years and thereafter are as follows:

2012	\$ 6,984,695
2013	4,977,468
2014	5,192,391
2015	5,462,460
2016	5,650,634
Thereafter	<u>84,215,321</u>
	<u>\$ 112,482,969</u>

Under covenants of the Mortgage and Security Agreement (Mortgage), dated July 2, 2001, by and among the Cooperative, CFC and the United States of America acting through RUS, RUS Transmission Loan Contract, dated July 2, 2001, between the Cooperative and the United States of America acting through RUS, and RUS general and preloan policies and procedures, the Cooperative must, among other things, obtain approvals from both RUS and CFC for certain transactions and contracts and design its rates with a view to maintaining, on an annual basis, an average times interest earned ratio of 1.05 and debt service coverage ratio of 1.0 calculated retrospectively using the highest ratios from two of the three most recent years. Management believes these financial covenants have been achieved as of December 31, 2011.

Long-term debt is collateralized by the pledge of all assets.

The fair value of the Cooperative's long-term debt is estimated by discounting the future cash flows required under the terms of each respective debt agreement by the currently quoted or offered rates for the same or similar issues of debt with similar maturities. The principal amounts of variable rate debt are considered reasonable estimates of their fair value. The fair value of debt at December 31, 2011 and 2010 was \$123,288,031 and \$120,802,115, respectively.

Components of interest expense at December 31 consist of the following:

	<u>2011</u>	<u>2010</u>
Total interest costs and related amortization	\$ 5,528,063	\$ 5,567,625
Interest capitalized	<u>(20,177)</u>	<u>(21,005)</u>
Total interest expense	<u>\$ 5,507,886</u>	<u>\$ 5,546,620</u>

**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**NOTES TO FINANCIAL STATEMENTS**

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**Note 8 – Accounts Payable**

Accounts payable at December 31 consists of the following:

	<u>2011</u>	<u>2010</u>
Wheeling charges	\$ 344,456	\$ 188,201
Payable to related party	9,635	-
Trade and other	<u>737,635</u>	<u>1,090,404</u>
Total accounts payable	<u>\$ 1,091,726</u>	<u>\$ 1,278,605</u>

**Note 9 – Member Advances**

**Member investment program** – The Cooperative offers all members the ability to invest funds with the Cooperative on a short-term basis for periods up to nine months. The Cooperative did not have outstanding liabilities for notes at December 31, 2011 and 2010.

**Prepaid transmission program** – The Cooperative also offers a prepayment program for all members whereby the members may make interest-bearing prepayments of their monthly transmission billings. Terms offered on the prepayment program are the same as the member investment program. The prepayment and accrued interest are applied to the members' transmission billings on the date such billings become due. The Cooperative recorded liabilities for prepayments of \$349,347 and \$332,938 at December 31, 2011 and 2010, respectively. The interest rate on prepayments outstanding during 2011 and 2010 averaged .36% and .57%, respectively. Interest expense on the prepayment program was approximately \$382 and \$2,506 for the years ended December 31, 2011 and 2010, respectively.

**Note 10 – Commitments and Contingencies**

**Rate increase** – On October 16, 2009, the Cooperative filed an application for rate relief requesting new rates to become effective on January 1, 2011. On December 10, 2010, the Arizona Corporation Commission issued a decision approving a 26.43% increase in revenues and authorizing new rate tariffs, which became effective on January 1, 2011.

**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**NOTES TO FINANCIAL STATEMENTS**

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**Note 10 – Commitments and Contingencies (continued)**

**Personnel staffing agreement** – The Cooperative has a personnel staffing agreement with Sierra (see Note 15), whereby Sierra provides personnel staffing services for all positions except certain key staff and management positions, who are employees of the Cooperative. The personnel staffing agreement provides that the Cooperative shall pay for the actual and verifiable costs incurred by Sierra for personnel, materials, supplies, and all other direct, indirect and overhead costs incurred by Sierra in carrying out its responsibilities under the personnel staffing agreement. The term of the staffing agreement is for five years from the effective date of August 1, 2006. The agreement is automatically extended for five successive years unless terminated by either party no later than two years prior to the conclusion of such fifth contract year. Neither the Cooperative nor Sierra gave the two-year advance notice of termination, thereby extending the agreement for an additional five-year term.

Approximately 41% of the personnel employed by Sierra are subject to a collective bargaining agreement. Sierra entered into a five-year collective bargaining agreement, effective March 1, 2005. Effective March 1, 2010, the agreement was extended for another three years.

**Class A member network service agreements** – The Cooperative has an agreement with Arizona Electric Power Cooperative, Inc. (AEPCO), to provide network integration transmission service to deliver AEPCO's power to AEPCO's all-requirements Class A distribution cooperative members. The Cooperative entered into separate agreements to provide network integration and point-to-point transmission service to AEPCO's partial requirements Class A members. These agreements remain in effect so long as the associated wholesale power contract between AEPCO and the Class A member remains in effect, all of which terminate on December 31, 2035. In the opinion of management, the Cooperative will be able to provide service in accordance with these agreements.

**AEPCO bundled transmission service agreements** – The Cooperative has agreements with AEPCO to provide point-to-point for AEPCO's bundled power sales agreements and the Joint Generation Contingency Reserve Plan as developed by AEPCO and SWTC. These agreements provide for reserved transmission capacity totaling 98 MW and will remain in effect in accordance with each respective service agreement. In the opinion of management, the Cooperative will be able to provide service in accordance with these agreements.

**Other transmission service agreements** – The Cooperative holds separate transmission service agreements (Point to Point and Network Integration) with other entities in accordance with the Cooperative's Open Access Transmission Tariff (OATT) or other pre-OATT agreements. These other transmission service agreements provide for reserved transmission capacity up to 30 MW and will remain in effect in accordance with each respective service agreement. In the opinion of management, the Cooperative will be able to provide service in accordance with these agreements.

## **SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

### **NOTES TO FINANCIAL STATEMENTS**

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#### **Note 10 – Commitments and Contingencies (continued)**

**Transmission wheeling agreements** – The Cooperative purchases transmission wheeling rights from other entities. There are currently eleven (seven with Western Area Power Administration – Lower Colorado, two with Southern California Edison and one each with Tucson Electric Power and Arizona Public Service Company) transmission wheeling agreements under which the Cooperative purchases transmission to provide for deliveries to AEPCO's Class A members loads. These transmission wheeling agreements provide for wheeling rights up to 288 MW and expire at various times.

#### **Lines of credit**

**Short-term financing** – The Cooperative maintains a line of credit for short-term financing with CFC of \$6,000,000 maturing December 28, 2013. Interest rates on all advances under the line of credit will be equal to the total rate per annum as may be fixed by CFC from time to time, which shall not exceed the *Prevailing Bank Prime Rate*, as published in the Money Rates column of *The Wall Street Journal*, plus 1.00% per annum. The bank prime rate at December 31, 2011 was 3.25%. No amounts were drawn under the line of credit at December 31, 2011 and 2010.

**Company credit card program** – The Cooperative also maintains a line of credit agreement with CFC for \$250,000 as part of its company credit card program. The agreement was effective July 23, 2004 and will remain in effect until terminated by either party. Interest rates on all advances under the line of credit will be equal to the total rate per annum as may be fixed by CFC from time to time, which shall not exceed the *Prevailing Bank Prime Rate*, as published in the Money Rates column of *The Wall Street Journal*, plus 1.00% per annum. The bank prime rate at December 31, 2011 was 3.25%. No amounts were drawn under the line of credit at December 31, 2011 and 2010.

#### **Note 11 – Income Tax Status**

The Cooperative is exempt from income taxes under the provisions of Section 501(c)(12) of the Internal Revenue Code, except to the extent of unrelated business income, if any. Effective January 1, 2009 the Cooperative adopted Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 740-10, relating to accounting for uncertain tax positions. As of December 31, 2011 and 2010, the Cooperative does not have any uncertain tax positions. The Cooperative files an exempt organization and unrelated business income tax return in the U.S. federal jurisdiction and states of Arizona and California and is no longer subject to examination by taxing authorities before 2008.

## SOUTHWEST TRANSMISSION COOPERATIVE, INC.

### NOTES TO FINANCIAL STATEMENTS

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#### **Note 12 – Retirement Plans**

The Cooperative has a defined benefit pension plan covering substantially all of its employees. Pension benefits are provided through participation in the National Rural Electric Cooperative Association (NRECA) Retirement and Security Program. The Cooperative contributes a percentage of salaried and union employees' earnings to the program, as prescribed by NRECA. In response to impacts from the economic downturn, the required contribution rate increased significantly in 2010 and was adjusted for market conditions in 2011. Contributions made to this plan approximated \$523,000 and \$652,000 for the years ended December 31, 2011 and 2010, respectively. The Cooperative's policy has been to fund retirement costs annually as they accrue.

This multi-employer plan is available to all member cooperatives of NRECA. Information concerning the Cooperative's proportionate share of the excess, if any, of the actuarially computed value of vested benefits over the pension plan's net assets is not available from NRECA, the plan administrator.

The Cooperative also offers participation in the NRECA SelectRE Pension Plan to all employees meeting certain minimum service requirements. This plan has 401(k) salary deferral features. Under this plan, the Cooperative matches a percentage of the employees' contributions to the plan. The Cooperative's contributions to the plan were approximately \$69,000 and \$93,000 for the years ended December 31, 2011 and 2010, respectively.

#### **Note 13 – Concentration of Customers and Credit Risk**

Revenue for the year ended December 31, 2011 included revenue from four customers whom each individually represented more than 10% of the total operating revenue. Revenue from these customers collectively represented approximately 83% of total operating revenue for 2011. Accounts receivable related to operating activities at December 31, 2011 included amounts owed from four customers, whom each individually represented 10% or more of the total accounts receivable balance. The amounts owed from these customers collectively represented approximately 84% of the total operating accounts receivable balance at December 31, 2011.

Revenue for the year ended December 31, 2010 included revenue from four customers whom each individually represented more than 10% of the total operating revenue. Revenue from these customers collectively represented approximately 85% of total operating revenue for 2010. Accounts receivable related to operating activities at December 31, 2010 included amounts owed from four customers, whom each individually represented 10% or more of the total accounts receivable balance. The amounts owed from these customers collectively represented approximately 85% of the total operating accounts receivable balance at December 31, 2010.

## **SOUTHWEST TRANSMISSION COOPERATIVE, INC.**

### **NOTES TO FINANCIAL STATEMENTS**

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#### **Note 14 – Leases**

**Office facilities and machinery and equipment** – The Cooperative entered into two separate 60-month lease agreements, effective as of August 1, 2001, to lease office facilities and substantially all the machinery and equipment used in the Cooperative's daily operations (see Note 15). On July 27, 2006, the term of these leases were amended to automatically renew for an additional 60 months beginning August 1, 2006, and every five years thereafter. Rent expense for the office facilities and machinery and equipment totaled approximately \$806,000 and \$1,135,000 for the years ended December 31, 2011 and 2010, respectively.

**Commercial office building** – Effective January 19, 2009, the Cooperative entered a payment and cost allocation agreement with Sierra for the sole use of two offices and use of the conference room at the Tucson Office Facility. The Cooperative is assessed by Sierra through cost allocation methodology 7.50% of office facility expenses as defined in the agreement. Rent expense for the lease of the commercial office building was approximately \$5,000 and \$7,000 for the years ended December 31, 2011 and 2010, respectively, and is included in administration and general on the accompanying statements of revenues and expenses and unallocated accumulated losses. This agreement was terminated September 30, 2011.

**Network computing equipment** – The Cooperative entered into a master lease agreement dated December 14, 2004 for the lease of network computing equipment to be implemented in multiple stages. The Cooperative implemented two stages in 2005, two in 2006 and a final stage in 2008. The original term of each lease schedule is 36 months. The original term of the lease(s) shall automatically be extended on a monthly basis unless either party notifies the other not later than 90 days prior to the end of the original term or 30 days prior to the end of any extended term. Rent expense for the network computing equipment totaled approximately \$18,000 and \$49,000 for the years ended December 31, 2011 and 2010, respectively.

The following summarizes the future minimum lease payments at December 31, 2011:

2012	\$ 871,378
2013	869,850
2014	853,042
2015	853,042
2016	497,608
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	\$ 3,944,920
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**SOUTHWEST TRANSMISSION COOPERATIVE, INC.**  
**NOTES TO FINANCIAL STATEMENTS**

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**Note 15 – Related Parties**

The Cooperative is a member of Sierra. Sierra is a member-owned, nonprofit Arizona cooperative corporation organized to provide personnel staffing and energy services and products to its members and other customers. Members of Sierra are collectively represented by one director seated on Sierra's board of directors. Each director is entitled to one vote on each matter submitted to a vote at a meeting of the directors (see Note 3).

AEPCO and Sierra are Class B members of the Cooperative. Class B members of the Cooperative are collectively represented by one director seated on the Cooperative's board. Each director is entitled to one vote on each matter submitted to a vote at a meeting of the directors.

The Cooperative has an agreement with Sierra, whereby Sierra provides personnel staffing services (see Note 10 – *Personnel Staffing Agreement*). The Cooperative recorded expenses for personnel staffing services totaling approximately \$7,690,000 and \$7,521,000 for the years ended December 31, 2011 and 2010, respectively. The Cooperative had accounts payable to Sierra totaling approximately \$10,000 at December 31, 2011 and no accounts payable at December 31, 2010. The Cooperative had no accounts receivable from Sierra at December 31, 2011 and accounts receivable totaling approximately \$188,000 at December 31, 2010.

The Cooperative has an agreement with AEPCO for the lease of office facilities and machinery and equipment (see Note 14 – *Office Facilities and Machinery and Equipment*). Rents paid to AEPCO totaled approximately \$806,000 and \$1,135,000 for the years ended December 31, 2011 and 2010, respectively.

The Cooperative has also entered into agreements with AEPCO for transmission service (see Note 10 – *Class A Member Network Service Agreements and AEPCO Bundled Transmission Service Agreements*). The Cooperative recorded revenues for these agreements totaling approximately \$7,225,000 and \$14,082,000 for the years ended December 31, 2011 and 2010, respectively. The Cooperative had accounts receivable from AEPCO totaling approximately \$664,000 and \$1,501,000 as of December 31, 2011 and 2010, respectively. The Cooperative had no accounts payable to AEPCO as of December 31, 2011 and 2010.

**REPORT REQUIRED BY GOVERNMENT AUDITING STANDARDS**





**REPORT OF INDEPENDENT AUDITORS ON INTERNAL CONTROL OVER FINANCIAL  
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF  
FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT  
AUDITING STANDARDS***

To the Board of Directors  
Southwest Transmission Cooperative, Inc.

We have audited the financial statements of Southwest Transmission Cooperative, Inc. (the Cooperative) as of and for the year ended December 31, 2011 and have issued our report thereon dated April 23, 2012. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

**Internal Control over Financial Reporting** – Management of the Cooperative is responsible for establishing and maintaining effective internal control over financial reporting. In planning and performing our audit we considered the Cooperative's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Cooperative's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Cooperative's internal control over financial reporting.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described above and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control that we consider to be material weaknesses, as defined above.

**REPORT OF INDEPENDENT AUDITORS ON INTERNAL CONTROL OVER FINANCIAL  
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF  
FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT  
AUDITING STANDARDS* (continued)**

**Compliance and Other Matters** - As part of obtaining reasonable assurance about whether the Cooperative's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We noted certain matters that we reported to management of the Cooperative in a separate letter dated April 23, 2012.

This report is intended solely for the information and use of the Board of Directors and management of the Cooperative, Arizona Corporation Commission and the Rural Utilities Service and supplemental lenders and is not intended to be and should not be used by anyone other than these specified parties.

*MISS Adams LLP*

Portland, Oregon  
April 23, 2012

# Exhibit GEP-2

# Southwest Transmission Cooperative, Inc.

## Hypothetical Transmission Revenue Adjustor Example

Line No.	Description	Col. A	Col. B	Col. C	Col. D
1	<u>SWTC Application for Rate Relief:</u>				
2	Annual Transmission Revenue Requirement - Schedule G2A, Page 3		\$	28,843,974	
3	1 CP Load - MW - Schedule G2A, Page 3			939.6	
4	P-to-P Rate - \$/kW month				\$ 2.558
5					
6	Annual Transmission Revenue Requirement		\$	28,843,974	
7	Less: P-to-P Revenues - Schedule G2A, Page 11	4,008,000	\$ 2.558	10,252,464	
8	Plus: Mohave System Discount. Schedule G2A, Page 11			257,248	
9	Network Service Revenue Requirements			18,848,758	
10	Network Service Monthly Revenue Requirement				\$ 1,570,730
11					
12	<u>Hypothetical 25 MW P-to-P Contract Addition:</u>				
13	Annual Transmission Revenue Requirement		\$	28,843,974	
14	Less: P-to-P Revenues - Schedule G2A, Page 11	4,008,000	\$ 2.558	10,252,464	
15	Less: Additional P-to-P Load Revenue	300,000	\$ 2.558	767,400	
16	Plus: Mohave System Discount. Schedule G2A, Page 11			257,248	
17	Adjusted Network Service Revenue Requirement			18,081,358	
18	Adjusted Network Service Monthly Revenue Requirement				\$ 1,506,780
19					
20	<u>Hypothetical 25 MW P-to-P Contract Termination:</u>				
21	Annual Transmission Revenue Requirement		\$	28,843,974	
22	Less: P-to-P Revenues - Schedule G2A, Page 11	4,008,000	\$ 2.558	10,252,464	
23	Plus: Lost P-to-P Load Revenue	300,000	\$ 2.558	767,400	
24	Plus: Mohave System Discount. Schedule G2A, Page 11			257,248	
25	Adjusted Network Service Revenue Requirement			19,616,158	
26	Adjusted Network Service Monthly Revenue Requirement				\$ 1,634,680